Doctorate in Professional Studies

"International financial reporting standards (IFRS): Exploring financial evidence from Australia, Germany, Greece, the UK and the US"

ROUVOLIS, Sotirios

Candidate Number: M00290225

Subject Area: Accounting-Finance

Module code: DPS 5240

Institute for Work Based Learning
Middlesex University

February 2019

Disclaimer

"The views expressed in this document are mine and are not necessarily the views of my supervisory team, examiners or Middlesex University."

Word Count: 72.011

ACKNOWLEDGEMENTS

This final project is the end of a programme aiming to contribute to my personal, social, professional and academic improvement. For this reason, I must especially acknowledge my family for their support and funding, and above all give special thanks to my advisor, Dr Kyriacou who guided me along the right path, and to my fiancée Maria who supported me in continuing my efforts.

Table of Contents

List of Tables

List of Figures

Abbreviations

Abbreviation	Definition
AASB	Australian Accounting Standards Board
A-IFRS	Australian International Financial Reporting Standards
AQR	Asset Quality Review
ASE	Athens Stock Exchange
ASX	Australia Stock Exchange
DAC	Discretionary Accruals
DAX	Deutsche Boerse AG German Stock Index
Deloitte	Deloitte Touche Tohmatsu Limited
DJIA	Dow Jones Industrial Average
EDGAR	Electronic Data Gathering, Analysis, and Retrieval
EITF	Emerging Issues Task Force
E & Y	Ernst and Young
FASB	Financial Accounting Standards Board (US GAAP)
FCAG	Financial Crisis Advisory Group
FE	Fixed Effects
FEE	Federation of European Accountants
FFS	Falsified Financial Statements
FSB	Financial Stability Board
FTSE	Financial Times Stock Exchange for London Stock Exchange
GAAP	Generally Accepted Accounting Principles
HLM	Hierarchical Linear and Nonlinear Modeling
IAS	International Accounting Standards
IASB	International Accounting Standards Board (standard-setting body of the IFRS Foundation)
IASEB	International Accounting Education Standards Board
IDW	Institut der Wirtschaftsprüfer in Deutschland
IFRS	International Financial Reporting Standards
IPSAS	International Public Sector Accounting Standards
KPMG	Klynveld Peat Marwick Goerdeler
MiFID	Markets in Financial Instruments Directive (Directive 2004/39/EC)
MLP	Multi-Layer Perceptron Neural Network
NASDAQ	NASDAQ Composite
OLS	Ordinary Least Square
PEG	Price to Earnings Growth Measure as calculated in Easton and Monahan (2005)
PNN	Probabilistic Neural Network
PwC	Pricewaterhouse Coopers
RBF	Radial Basic Functions Network
REML	Restricted Maximum Likelihood
SEC	U.S. Securities and Exchange Commission
SPSS	Statistical Package for the Social Sciences

STATA	Statistics and Data
TSE	Tokyo Stock Exchange
UK	United Kingdom
US	United States of America

Glossary

Earnings management	It is the on-purpose increase or decrease of revenues, profits, or earnings per share figures (income smoothing). It is a form of fraud and differs from a reporting error.
Value relevance	Reflects the exact economic value of the company
Insider trading	Trading activities of a person who is closely related to the company, such as directors, officers, senior managers, employees and associates,
Fair value	It is the opposite of the historical cost. It is the market value of a company's assets.
BIG- 4 auditors	It refers to the four largest accounting firms in the world, meaning Deloitte Touche Tohmatsu Limited (DTTL), Pricewaterhouse Coopers (PwC), Ernst and Young (E&Y) and Klynveld Peat Marwick Goerdeler (KPMG). All other companies are characterized as non-Big 4 auditors.
Common-law	Common-law or Market-oriented or shareholder-oriented could be characterised the accounting system that used to follow the Anglo-Saxon countries (i.e. UK, US)
Code-law	Continental/code-law or stakeholder-oriented or tax-driven is the accounting sytem that used to follow European countries before IFRS (i.e. Germany, Greece)
Accruals	There are many methods for their calculation. In general they could be divided into non-discretionary (normal) and discretionary (abnormal). The larger the absolute value of discretionary accruals, the lower the quality of earnings.

ABSTRACT

This project relates to the financial effects of the official adoption of International Financial Reporting Standards (IFRS) in 2005. IFRS is a set of unique, high-quality standards that aim to increase the transparency and comparability of information in firms' financial statements. However, since their implementation, issues have arisen, such as their introduction in the US, and the global financial crisis in 2008 which resulted in a huge downturn in global stock markets. There are indications that, under certain circumstances, firms have used earnings management to gain competitive advantage. Earnings management, or the deliberate misstatement of earnings figures, is a form of fraud. It is an important issue because firms that use such techniques disorientate investors and market participants, and increase market imbalances. Many studies have focused on the connection between earnings management and IFRS, provoking three core questions. Would it have been better for countries to apply their own national GAAP? Has acceptance of IFRS in the US improved matters? Might better measures have been taken to avoid or eliminate any management effects during the crisis? This study involved quantitative analysis of secondary numerical data, focusing on the Australian, German, Greek, UK and US stock markets. The findings reveal that IFRS has not succeeded in eliminating falsified statements entirely. However, this study helps market participants by developing a database of investment strategies based on the potential for firms to use earnings management. It contributes to theory by exploring additional tools and motives for earnings management, and to practice by analysing possible methods for investors and authorities to detect such practices. It is thus of interest to both academics and market professionals.

Keywords: IFRS, US GAAP, Earnings Management, Insider Trading, Cost of Capital, Fraud Auditing, Financial Crisis, Shadow Banking

CHAPTER 1: INTRODUCTION

1.0 Introduction

In this chapter, I outline the basic concepts and context of my project. I describe the background of my research, and outline my critical theoretical learning and professional experiences connected with my study. I also introduce the development of my initial research questions, the motivation for and contributions of my research, and my aims and objectives, all of which explain why I chose to engage with this subject. Finally, I provide a brief overview of the methodology of this research.

1.1 Background to the research area

My project was conducted against a rich background of events before and after the adoption of official International Financial Reporting Standards (IFRS; see Appendix I, Table 1). As Aisbitt (2006, p.118) suggests, prior to the implementation of IFRS, the literature concentrated on the European Council's efforts to standardise, harmonise and converge accounting regulations (Mueller, 1967; Briston, 1978, 1989; Cairns, 1997), and afterwards on their financial effects on companies that had adopted IAS and IFRS (Street et al., 1999; Street and Gray, 2001; Sucher and Alexander, 2002). As part of the broader context of social sciences (Starbuck, 2003), accounting and finance have always provoked interesting debates, with theoretical and practical implications. Their primary role is to communicate information from companies to shareholders and stakeholders, but as companies continue to aspire to a global reporting culture (Zarzeski, 1996), they must process information between different countries. Thus, academic interest in international accounting has increased, focusing on integrating accounting regimes, as frameworks have undergone huge changes in recent years.

Initially, research focused on identifying groups of European countries with similar accounting systems (Haller, 2002). Many researchers (e.g. Nobes, 1983; Frank, 1979; Nair and Frank, 1980) sought to classify and adjust accounting systems according to each country's financial system (bank-oriented versus market-oriented), legal system (code-law versus common-law) and type of ownership (Anglo-Saxon versus Continental). Anglo-Saxon countries (e.g. the UK and the US), which are market- or shareholder-oriented and subject to common law, follow a substantially different accounting system from the traditional accounting system of

Continental/code-law countries (e.g. Germany and Greece), which is stakeholder-oriented and tax-driven (Harris et al., 1994; Ball et al., 2000; Leuz and Wustemann, 2004). In the former, firms are financed mainly by investors, while in the latter, capital is provided by the state, banks or owners (Ball et al., 2000; Nobes, 1998; La Porta et al., 1997). One of the greatest differences is the fair-value orientation, as analysed in greater detail below (Coopers and Lybrand, 1993; Alexander and Archer, 2000). Most studies of IFRS still classify their samples in this way to justify their results on the effects of the new standards.

However, European communities recognised a need for further cooperation in financial reporting, so in 1973, several professional accountancy bodies cooperated and established the International Accounting Standards Committee (IASC). The IASC formulated the International Accounting Standards (IAS), establishing a regime that improved financial and accounting regulation. Although in the medium term the European Council (EC) published the Fourth (78/660/EC) and Seventh (83/349/EC) European Union (EU) Directives,[1] aiming to converge European accounting standards, IAS formulation was one of the most significant steps toward reducing accounting differences across EU countries (Haller, 2002). At the same time, large-scale accounting scandals were revealed, such as the dot-com collapse and Enron in 2001 (CGAA, 2003). These cases differed from reporting errors, in that these companies were accused of accounting irregularities. Operating in an environment in which firms were forced to maximise their profits and stock value, they were driven to satisfy conflicting interests, even by implementing practices designed to manipulate their financial picture (Jiraporn et al., 2008). This meant that some business insiders were able to modify financial reports to mislead all interested parties about the firms' financial performance (Healy and Wahlen, 1999). This intentional misrepresentation and misquotation of accounting measures (Elliot and Willingham, 1980) involved not only artificial increases or decreases in revenues, profits or earnings, but also improper revenue recognition, inappropriate accruals and estimates of liabilities, excessive provisions, generous reserve accounting, and much more. The literature refers to such practices as 'creative accounting' (Schipper, 1989). Creative accounting is a change to a financial reporting or other measure to alter a company's accounting figures and disorientate investors regarding the firm's value (Mulford and Comiskey,

[1] Directives are rules or regulations issued by the EU, and member states are obliged to incorporate them into their national laws (Roberts, 1998).

2002). The most common method used is income smoothing or earnings management. Earnings management refers to intentional increases or decreases in revenues, profits or earnings-per-share figures. It is a form of fraud rather than a reporting error. For this reason, the responsible authorities acted to prevent such cases in the future and created a unique framework to make features comparable across all firms. As a result, the US enforced protection mechanisms by introducing the Sarbanes-Oxley Act in 2002 (SEC, 2003).

In the same year, the European Parliament approved Regulation No. 1606/2002, as proposed by the EC (2002). This act determined that for each financial year starting on or after 1 January 2005, companies traded on a regulated market in any European member state and governed by EU law should prepare their consolidated financial statements in conformity with IFRS as adopted at the European level. IFRS is 'a single set of high quality, understandable and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements' (IASB, 2006). The International Accounting Standards Board (IASB), which replaced the IASC in 2001, was responsible for introducing a new accounting era into the EU, based on a solid plan and a series of EU directives (Christensen et al., 2013). However, in addition to Europe, other countries such as Australia also adopted or permitted them, with a vision of greater transparency and integrity. Consequently, IFRS adoption resulted in considerable convergence of accounting regimes (Armstrong et al., 2010), aiming to bring balance between adopters, and improve the quality, comparability and transparency of financial reports. This enabled authorities, investors and shareholders to gain easy access to timely and accurate financial data from companies located in different countries. IFRS adoption was therefore one of the most significant events in the history of financial reporting, attracting global research interest (Byard et al., 2011; Zeghal et al., 2012).

As a result, debates began around IFRS adoption. Indeed, many studies find that it has had substantial positive effects (Byard et al., 2011), and has reduced information asymmetry (Frankel and Li, 2004). Such research suggests that IFRS has ensured high-quality information and increased the comparability of financial reports, and has thus encouraged international trading and investment efficiency (Bushman et al., 2006; Sun, 2006), and that its merits outweigh its drawbacks. On the other hand, many studies detect controversial effects on firms' financial statements (Walton, 2004). They state that cross-country differences continue following the

implementation of IFRS, and suggest that accounting regimes cannot overcome differentiation between the legal and political environments of each country (Soderstrom and Sun, 2007). It seems, therefore, that during the early years of IFRS adoption, many studies tried to illustrate their performance by focusing on their potential effects, which can be summarised in terms of two significant areas of contention: creative accounting, as previously explained (Leuz et al., 2003), and fair value (Ali and Hwang, 2000). Fair value differs from evaluating assets based on historical costs as in old national GAAP, using the cost at which assets were bought. In this approach, companies used to calculate depreciation on their assets up to the ends of those assets' operational lives. However, IFRS requires some financial assets, such as fixed assets and financial instruments held for trading, including derivatives and available-for-sale financial assets (i.e. IAS 16, IAS 39), to be recognised at market value, namely fair value. As will be revealed in Chapter 2, many researchers claim that this may increase the volatility of accounting figures and have noticeable financial effects.

In addition, over time, IFRS have been affected by many emerging events that have raised questions about their effectiveness, one of the most significant being the 2008 financial crisis. This last crisis appeared in the US banking sector but soon spread to Europe. Many market participants blamed the nature and structure of IFRS, so theoretical research again focused on the fair value orientation of IFRS, seeking to detect any disadvantages under turbulent economic conditions (Mallet, 2008). The crisis tested the cohesion of IFRS, and research assessed their responses to similar situations in different countries. Unfortunately, IFRS appear not to have reached the level of harmonisation and integration needed, as countries did not present any typical reaction to the crisis, while some have yet to recover from its effects. Perhaps for this reason, the IASB has sought to reconsider some traditional accounting tools, even starting a debate on the structure of firms' annual reports.[2] It seems, therefore, that these emerging and challenging situations have prepared the ground for new changes to accounting rules (Hatherly and Kretzschmar, 2011). However, in making such improvements, consideration must also be given to the observation in recent press releases that warning signs went unheeded and still exist in fraudulent auditing cases,

[2] The Federation of European Accountants (FEE) asked accountants to share their thoughts on the possible implications, potential changes and future perspectives and challenges of IFRS. The results were published in its report, *The Future of Corporate Reporting* (2015).

such as the recent case of Globo in the UK,[3] and any new crises[4] that might emerge. Overall, enhancement of accounting regimes seems always to have been regarded as a critical issue, but has failed to achieve the intentions of the IFRS (Weibenberger et al., 2004).

1.2 Connection between the Research Area and Myself

Against this background, I had an opportunity to delve into core accounting concepts, during my studies and in my professional career. I was taught about several cases, including Enron, and was able to observe other equally important accounting events through my work. In all cases, I was amazed by the ratios and financial statistics derived from firms' financial statements. I still believe that these financial measures help shape managers' decisions and enable their businesses and investors to make choices; yet, at the same time, I constantly wonder how I might use these data to predict a company's future prospects. My interest in this became even more intense as it was revealed that there were early warning signs before the crisis occurred. Therefore, I decided to combine my knowledge as an accountant and a market analyst, because by considering features of both the market and accounting firms, I might better apply my ratio analysis models. Learning gained during my studies and work helped me to do this.

1.2.1 My study journey

My interest in accounting arose during my bachelor's degree in business administration. Although I had enrolled with the intention of following a marketing career, by the end of it, I realised that I had gained specific awareness and had achieved better performance in accounting and finance modules. I had considered their potential, and had become familiar with firms' accounting values and figures. I had been introduced to fundamental accounting principles and the basis of the Greek double-entry accounting system, and had learned how to react to real financial problems. However, I still had second thoughts about a career in accounting. Thus, I

[3] Globo enterprise is one of the latest cases to shock European stock markets, as the company was delisted from the AIM market in the UK after being accused of market abuse, falsification of accounts and insider dealing. US investment company, Quintessential Capital Management (QCM) was the first to detect this case (http://www.independent.co.uk/news/business/analysis-and-features/globo-sails-too-close-to-the-wind-a6709986.html).

[4] There are increasing concerns about toxic loans in the Italian banking sector (http://www.cnbc.com/2016/09/03/demand-to-buy-italys-nonperforming-loans-is-growing-bpms-rossi-says.html).

decided to enrol on a master's programme in management. This was helpful, as it raised my awareness of issues relating to the financial underpinnings of accounting. I learnt how to use and interpret information from firms' balance sheets, cash flow statements and profit and loss accounts. I studied the Greek capital market and focused on the data provided by its quoted companies, enabling me to evaluate empirical data critically in order to analyse companies' performance.

However, my greatest achievement during my studies was my master's dissertation entitled 'The post-adoption effects of the implementation of the IFRS in Greece'. This research focused on the effects of IFRS adoption in Greece, where I was able to observe and understand fundamental IFRS concepts and principles. The study examined 254 firms listed on the Athens Stock Exchange (ASE), and was one of the first to describe the consequences of IFRS adoption in Greece, suggesting areas for future research on IFRS. This was my first attempt to conduct research, which enabled me to develop the capabilities necessary to accomplish similar projects. This first experience as a researcher helped me to understand how to operate creatively and make sense of data. Thus, I succeeded in producing significant outcomes that contributed to new knowledge creation, as examination of IFRS and their adoption by Greek firms was at a preliminary stage. Throughout this study, I maintained high ethical standards, and achieved reliability and validity. As a result of this methodological work, and with cooperation and guidance by my supervisor, Dr Iatridis, my dissertation was published in the *Journal of International Accounting, Auditing and Taxation* at the beginning of 2010.

1.2.2 My professional journey

This project is also relevant to my professional activities and interests. For the last ten years, I have straddled two professions, one as a self-employed accountant and the other as a stock market analyst in Greece. I am responsible for my company's compliance risk, taking all necessary measures, such as due diligence on clients' accounts, order recording, money laundering, and internal information detection. I am also responsible for executing orders to buy and sell shares listed on the ASE and foreign stock exchanges. In addition, my job involves carrying out financial analyses of firms listed on various stock markets and preparing companies' financial statements. I feel privileged to have this twofold job. Working at the same time as an accountant and stock market analyst has many advantages. First, I am able to book-

keep and work for firms that have implemented IFRS, making me more familiar with the subject of this project, and enabling me to evaluate IFRS in practice. Indeed, I recognise the need to regulate financial regimes and use assessment criteria for investment, risk analysis and decision making. I was able to check accounting figures to detect any practical considerations during IFRS implementation. At the same time, as a stock market broker, I was able to analyse the market performance of these firms to determine whether their accounting picture corresponded with their market behaviour. Therefore, I was able to implement, confirm, discover and share my consideration of these issues under extreme situations such as the last financial crisis. In this way, I have gained accounting expertise, as well as professional alertness and readiness for technical and fundamental analysis. All these proved to be perfect preparation for this project.

Closely related was my experience of economies other than Greece. After graduating from university, I worked as an accounting assistant in a construction company in Romania, where I was able to observe differences between the national accounting standards of the two countries. In 2006, Romania had introduced huge changes to accounting legislation to create greater transparency and prepare for EU membership in 2007. I was thus able to see how Romanian firms reacted to these changes, and this prompted me to consider how this reaction would differ from that of other countries such as Greece. Furthermore, as a stockbroker, I started to use foreign platforms for trading, including Metatrader, Metastock, NinjaTrader and Trader Workstation by IB, so I gained access to the fundamentals and market data of the most significant global economies. Thus, I was able to use data analysis models to compare the performance of Greek and other IFRS economies, as well as between different regimes, such as US General Accepted Accounting Principles (GAAP) and IFRS. This was difficult at first, as these analytical tools offered countless possibilities, producing large volumes of information that I was unable to use. I began to realise that there was a world of analysis that I could add to my parameters. Thus, I experimented with my models. I established statistical analysis models for market performance, introducing additional stimulus factors such as the auditors of examined firms. In this way, my enjoyment of the profession increased and I became more confident about my perspectives, while I also gained understanding, knowledge and experience of financial ratios.

During my working career, I have enhanced my professional experience and capability and have become more familiar with the subject of my research area, deepening my knowledge of accounting and auditing issues. Thus, I have managed to expand my horizons in this field, and I have become an expert in cases that seem meaningless but are extremely important. For example, I have gained experience of how institutions work. As I am in frequent touch with the Hellenic Capital Market Commission, I am familiar with how this organisation works, what it demands from listed companies and how it responds to emergency situations. This makes it easier for me to understand the workings and bureaucratic procedures of the IASB. Furthermore, I am in daily touch with many individual clients. Most people consider finance to be highly complicated, but my clients are always well informed, with coherent opinions, giving me opportunities to experience their intentions and feelings about IFRS implementation.

Overall, this seems to be a difficult area for research, but my professional career has enhanced my ability to scrutinise accounting problems and applications. To this end, I consider that my professional experience, my accounting activities and my research background added value to this research.

1.3 Motivation for the Study

This research was part of my doctoral project examining IFRS implementation. I led the study as a self-funding student at the Institute for Work-Based Learning at Middlesex University. The idea originated from the last financial crisis. As an accountant and market analyst in Greece, I had an opportunity to question the effectiveness of IFRS for dealing with such situations. Occasioned by this fact, I discovered that other issues concerning IFRS had not yet been thoroughly examined. Although there is no specific motivational framework for research, Teddlie and Tashakkori (2009) suggest four potential rationales: a reaction to practical problems, a result of previous research, intuition based on previous experience, or a theoretical or conceptual framework. Three of these criteria seemed to apply in my case.

1.3.1 Results of previous research

I was initially motivated to engage in this project as a logical extension of my master's dissertation. Following its publication, I discovered increased interest in IFRS by the accounting community, which sparked my intention to engage in

independent research, aiming to examine several additional cases distilled from IFRS adoption and to focus on more countries. Indeed, the introduction of IFRS has been characterised as a breaking point in accounting (Cairns, 2003), so I wished to examine further cases of IFRS implementation, based on accounting issues and debates. During my master's programme, I noticed that IFRS does not always diffuse accurate information. Although the responsible authorities have developed an appropriate decision panel to change or enhance specific principles of IFRS to remain up to date, many companies take advantage of IFRS tools that allow unrealised profits or future losses to be recorded in their financial statements, using these to display higher gains or losses. This increased my general feeling that nothing has changed, which was confirmed by literature critical about the disclosure of information under IFRS. In addition to such cases, I wanted to examine other market effects resulting from mandatory IFRS reporting. My fundamental motivation on this front was my interest in exploring stock market performance.

1.3.2 Intuitions based on previous experiences and reactions to practical problems

As described previously, my work specialises in statistical and fundamental analysis of listed companies that follow IFRS and US GAAP. For this reason, after starting my professional career, I decided to invest in a portfolio of companies based on minimum criteria for selection. These criteria were based on models from my theoretical and practical knowledge and were input with financial statement ratios. In this way, I was able to identify whether a company with strong fundamentals would have a high stock performance, and vice versa. However, over my professional life, I have detected many additional factors that may affect firms' market efficiency, such as earnings announcements, investors' estimations and auditors' evaluations. Indeed, I have observed several such cases that have unexpectedly affected the performance of my portfolio. For example, some listed companies with auditors' opinions without notes collapsed. In other cases, firms made fraudulent statements, yet controlling mechanisms identified them only after years or, even worse, failed to regulate them at all.

Similarly, companies with a high cost of capital may have better market performance than competitive companies with lower costs, and better statements may produce lower stock returns. From many examples derived from my experience as a

market professional, I observed investment companies that were selling while their reports recommended that their clients buy, as well as individual investors with internal information. Indeed, I once noticed that a week before a public offering announcement, a listed company increased its trading volume to a price 50 per cent higher than its market value. This may have been a case of internal information, but it could not be easily proved, even if someone juxtaposed the transactions. Many of my colleagues confirmed this and provided more cases. They noticed that in unaudited mid-term statements, most firms exhibited higher earnings, while in periods when the Greek government increased taxation for listed companies, they decreased their revenues. Greece has a small economy, and such phenomena can easily be revealed in the stock market. The difference is that under IFRS these cases seem to be fewer and better planned.

However, such situations do not occur only in Greece. As mentioned in Section 1.1, in the Enron case, a single auditing company, Arthur Andersen, was responsible for accounting misinterpretations, and because of this one company, a whole professional field in the US was found guilty. Globo is another case study of failure by UK auditors and analysts. Although it may seem unfair, and without ignoring the responsibilities of the authorities, under certain circumstances this criticism holds, raising questions about the implementation of IFRS. In fact, the last financial crisis may be another indicative example, as it proved that such professionals were unprepared to deal with its consequences. They did not predict any of the implications of the crisis, and continued to publish high ratings reports, even for companies that went bankrupt a few days later. These cases reveal that although both IFRS and US GAAP had been subject to amendments, they did not deal adequately with all the issues that emerged, and seemed always to be one step behind the facts, enhancing the vicious cycle of crisis.

However, were the auditors solely responsible for such cases, or might Enron's owners and managers, as well as market investors and analysts, have known about the falsified numbers? If so, why did they keep this privileged information secret? In many cases, accountants, auditors and even market analysts are forced by managers to participate in earnings management activities in order to preserve their jobs. In my work as an accountant, I often face such ethical dilemmas, and have had to deal with such issues during my professional career. However, from my point of view, creative accounting, as expressed in accounting misinterpretations, falsified statements,

earnings management and income smoothing, leads to unbalanced situations and provides only short-term benefits. Therefore, accountants should always protect their communities by refusing to participate in such activities, thereby also increasing their professional competency and broadening their perspectives.

Furthermore, over the years, I have realised that, as a practitioner-researcher, I am better able to transform my theoretical parameters into practical concerns. Therefore, since I always try to detect whether a company has falsified financial statements before making my investment decision, I was able to examine why and how companies engage in earnings management. However, at this point I considered an additional ethical dimension: should I keep my results to myself and leave the market to self-regulate, as in the Enron and Globo cases, or should I disseminate my findings to help other investors and accountants detect any income-smoothing activities early? Motivated by the latter, I considered that allowing unbalanced situations created by falsified statements to continue would be extremely unethical, so I should use my findings to provide suggestions to investors, other accounting users and authorities, in order to improve IFRS and mitigate creative accounting practices in future.

Therefore, this research project grew out of my professional work and a desire to better understand and evaluate IFRS. It offered a perfect opportunity to combine work and research, helping me to improve my professional investment strategy, to reconsider and re-evaluate my portfolio investment, and to raise the accounting community's awareness of how unethical and harmful financial misinterpretation may be. I enrolled on this DProf programme to complete my journey and contribute my parameters to IFRS market examination.

1.4 Brief Literature Review

1.4.1 Moving toward harmonisation

The need for a common accounting regime has increased, as many firms, especially those with an international orientation, pursue a global reporting culture (Zarzeski, 1996). The first comparative studies to consider international accounting diversity were published many years ago (Davidson and Kohlmeier, 1966). However, more extensive research was not undertaken until much later (Nair and Frank, 1981; Evans and Taylor, 1982), as globalisation of the business environment increased the need for harmonisation between different accounting standards (Graham and Neu, 2003). Harmonisation is the process by which accounting standards become more

interconnected through the establishment of a single accounting regime (Tay and Parker, 1990; Choi and Mueller, 1984). In this way, their level of variation decreases and comparability improves (Roberts et al., 2005). Tay and Parker (1990) use the notions of harmony, standardisation and uniformity to better define harmonisation. They describe harmony in terms of a cluster of companies adopting one or a few of the available methods. Uniformity is a closely-related concept, as it addresses the clustering of harmonised companies but with fewer possible methods, while standardisation is conceived to be the process of moving toward uniformity (Tay and Parker, 1990).

In addition to these considerations, Tay and Parker (1990) draw a further distinction in the harmonisation process, reaching similar conclusions to those of Van der Tas (1988). They classify harmonisation into formal (de jure) and material (de facto), distinguishing the process from the information. Formal harmonisation refers to legal or quasi-legal specification of the standards, while material refers to the level of harmonisation displayed by firms' financial reports (Fontes et al., 2005). Having identified all these concepts, the literature has focused on important cases that affect the integration of accounting standards, such as a country's economic, historical, institutional and cultural environment (Radebaugh and Gray, 1993), as well as on cases affected by harmonisation, such as accounting disclosures, investor protection and market accessibility (Hope et al., 2006). Thus, empirical studies have established a framework of advantages and disadvantages, as well as obstacles to implementation (Ashbaugh and Pincus, 2001; Pierce and Weetman, 2000).

1.4.1.1 Influential factors in harmonisation

Previous studies have identified many obstacles to the harmonisation of financial reporting. These are separated into three categories (Nobes and Parker, 2002). The first is the extent of differences between accounting standards. Even without convergence, over time, countries display similarities between their accounting standards, which has led researchers to determine clusters of countries with related regimes (Mueller, 1967; Nobes, 1983; Doupnik and Salter, 1993). For economies in the same cluster, the challenge of developing a single set of international financial reporting standards is less burdensome. A closely related issue is differences between legal systems. A country's legal system is highly important in international commercial activities, as it regulates all business practices and transactions (Hill,

2005). Legal systems are categorised as either common law or civil law. For example, the UK and the US both have a common-law system, so may find it easier to cooperate in their accounting standards and resolve any disputes more efficiently (Hill, 2005).

The second barrier is national accountancy bodies. In some economies, professional organisations determine the regime, as in the UK; in other cases, the government is responsible, as in France; while in the US, the FASB is accountable for this. The degree to which each institution is involved in standard setting varies, and countries that have differing institutions may face coordination problems (Salin, 2001). The last barrier to harmonisation is cultural differences (Hill, 2005). For example, countries' traditional economic values vary; some practices may increase inflation for Germany (Wyatt, 1997) or earnings volatility for the US (Saudagaran, 2004).

1.4.1.2 Benefits and critics

If the previously mentioned barriers can be reduced, the literature suggests some advantages for harmonised countries, such as time and cost savings. Companies that operate in different economies must consolidate different financial information to comply with the various national accounting regulations, whereas in a harmonised process, they no longer have to prepare multiple reports (Nobes and Parker 1991), thereby saving management costs by avoiding translation of accounting information (Brown and Tarca, 2001). Therefore, multinational corporations favour harmonisation (Cook, 1989; Choi and Levich, 1990), as communication of financial information between their subsidiaries becomes easier (O'Malley, 1993). Enhanced comparability of international financial information appears to increase foreign investors' interest, as they are better able to understand the financial statements of foreign companies (Samuels and Piper 1985). Studies indicate that investors prefer to focus on firms that have similar accounting standards because this reduces their cost of acquiring and processing financial information (Bradshaw et al., 2004; Chen et al., 2013), and increases their ability to make the right investment decisions (DeFond et al., 2011). Of course, companies also benefit, as investors' interest enhances their credibility (Gray, 1980; Tweedie, 2004), and helps lower their cost of capital (Saudagaran and Meek, 1997; Choi and Mueller, 1992) and increase their liquidity (Leuz and Wysocki, 2016).

As a result of all these benefits, the literature suggests that countries have many reasons to try to harmonise their accounting standards as far as possible, given their local economic, legal and social conditions (Choi et al., 1999). The value-relevance of a less developed accounting system may also be increase more than for systems that already have high standards (Daske et al., 2007). On the other hand, many consider that stronger economies will impose their standards inflexibly, and consequently harmonisation will be inadequate for developing countries' national economic, legal and cultural systems. Thus, companies need to be informed about any effects of harmonisation, such as increased volatility in balance sheet numbers, and about changes that it will bring to the accounting system, as in some cases negative impacts may emerge (Parker, 2002). Overall, considering the associated political and bureaucratic costs of harmonisation (Roberts et al., 1996; Brown and Tarca, 2001), debate continues regarding its impact on financial results (Rahman et al., 2002). Indeed, the literature indicates that international firms benefit greatly from harmonisation of accounting regimes, as transaction costs are reduced (Houston and Reinstein, 2001). However, not all firms operate internationally, and those that do not will be hard-pressed to comply with the additional complex and costly requirements of the convergence process without gaining any advantages from it (Choi et al., 1999).

1.4.2 Harmonisation after IAS/IFRS introduction

Adopting IFRS offer a solution to the barriers to harmonising accounting described previously. The IASB's objective was to formulate a set of accounting standards that would enforce comparability and transparency and improve qualitative financial reporting information. This would reduce uncertainty and information asymmetry for investors, enhance financing opportunities, decrease market uncertainty, and lead to higher stock returns (Guay and Verrecchia, 2007). These are strong motives for countries to adopt IFRS (Soderstrom and Sun, 2007), and firms in a lower-quality information environment will gain even greater benefits (Armstrong et al., 2007). This may suggest that comparability of accounting reports between companies from different countries may increase under IFRS (De Franco et al., 2011). However, the heterogeneity of economies that have adopted IFRS, especially those outside Europe, as well as their different reactions under common rules (Daske et al., 2007), may offer reasons for preserving accounting diversity. Therefore, recent literature has focused on whether IFRS adoption can achieve the desired

comparability across countries (Hail et al., 2010). Most researchers suggest that harmonisation cannot be achieved simply by implementing the new accounting standards (Weibenberger et al., 2004), as additional factors must be overcome. Basilico and Johnsen (2011, p.9) identify legal, cultural, governance and firm-level incentives for European countries (Nobes, 2006, 2010; Daske et al., 2008; Burgstahler et al., 2006; Berger, 2010). However, additional accounting issues may affect the level of IFRS harmonisation. The formulation process may give an advantage to countries that used to follow the Anglo-Saxon accounting system, as IFRS seems to have assimilated this framework (Nobes and Parker, 1998). Analysis of this environment reveals interesting results, as most EU countries follow the Continental accounting system (Megginson, 1997; Broomwich 1992; Damodaran, 1997), further influencing the harmonisation of IFRS.

However, it is not only material harmonisation that is questioned, as many researchers suggest that the IASB must also continue to work toward greater formal harmonisation (Pascual et al., 2002). They suggest that IFRS allow too much freedom of judgment in the same measurements and procedures, which may have adverse effects, as recent studies suggest that introducing common regulations to countries, without common strictness of enforcement, may have the opposite effect to the desired harmonisation (Christensen et al., 2011). In fact, simply mandating new accounting standards is not sufficient to produce uniformity, if they are not backed by strong, centrally harmonised institutions (Ball et al., 2003), eliminating any local enforcement (Ball, 2006). For example, firms' freedom of judgment in the recognition of provisions may affect the comparability of IFRS values. Indeed, they may classify provisions under IAS 12, IAS 38 as capitalisation options or IAS 11 (Hellman, 2008).[5] These options appear to be influenced by the national accounting culture and regulation of the countries in which companies operate. This, in turn, affects IFRS harmonisation (Feleaga et al., 2010). Further similar cases may relate to the fact that not all countries that have adopted IFRS require listed companies to complete their accounts according to IFRS. Furthermore, in relation to financial reporting for non-listed companies, the IASB seems to have allowed considerable discretion for national

[5] There is ongoing debate about the accounting conservatism of IFRS. Both the IASB and the FASB argue that prudence and conservatism are undesirable qualities in financial reporting information (IASB, 2006a, BC2.22), but as IFRS does not provide a strict framework for users, many used to undervalue their net assets, mainly by carrying forward tax losses and credits (IAS 12), development costs (IAS38) and construction contracts (IAS11) in order to gain competitive advantage (Hellman, 2008; https://www.researchgate.net/publication/247525447_Accounting_Conservatism_under_IFRS.)

enforcement, as some countries have already established their standards according to IFRS, while other economies, such as Greece, have only recently started to harmonise their national accounting values with IFRS for non-listed firms. Such state enforcement favours some countries and and companies, giving them an advantage over other IFRS countries and firms (Delvaille et al., 2005). Overall, the literature suggests a lack of consistency in accounting between member states and the standard rules of IFRS, just as in other harmonisation cases (Nobes, 1993).

1.4.3 IFRS in Europe and abroad

For Greece and weaker economies, adopting IFRS has been a critical factor in attracting investors' interest. Many believed that these countries would not be able to respond to the increased disclosure requirements and procedures of the new regime, especially since Greece had one of the highest levels of earnings management of any country (Leuz et al., 2003). On the other hand, many expected that their adoption would improve the quality of financial reporting, as well as the reliability, transparency and comparability of financial statements (Ballas et al., 1998). Many cases examined in the literature confirm that any harmonisation in accounting standards may help smaller economies. Indeed, the results suggest that the value relevance of consolidated figures has increased under IFRS for Greek companies (Karampinis and Hevas, 2011). Karampinis and Hevas (2011) observed an unexpected improvement in consolidated accounting net income and book value after IFRS adoption.

Most researchers suggest that the accuracy of Greek firms' accounting statements has improved (Papadatos and Bellas, 2011), although some cases of information asymmetry have been identified (Negakis, 2013). These may be attributable to the fair value orientation of IFRS. Furthermore, IFRS seems to have resulted in differences in performance from country to country. Many studies have focused on the influence of IFRS on the value relevance of accounting information, concluding that it differs across jurisdictions. For example, like Greece, the UK's accounting quality has strengthened, leading to more value-relevant accounting information following the introduction of IFRS (Iatridis, 2010; Tsoligkas and Tsalavoutas, 2011). On the other hand, IFRS has not produced the same results in Poland, where they have not impacted significantly on value relevance (Dobija and Klimczak, 2010). In Spain, early indications suggest that the value relevance of accounting information has not

significantly improved as a result of IFRS (Callao et al., 2007). This is important because it suggests that the local accounting enforcement applied by each country in conjunction with IFRS values negatively affects IFRS implementation and the comparability of financial statements.

Many studies have sought to examine such cases, and most findings are in line with those of Callao et al. (2007); however, there are cases where local enforcement seems to have produced benefits around IFRS adoption, suggesting that increased liquidity is attributable to the enforcement system of each country (Christensen et al., 2013). This mixed evidence seems to have led to a broadening debate following IFRS adoption. On the one hand, researchers suggest that IFRS adoption has not instantly delivered improvements in earnings comparability across Europe in relation to accruals and cash flow (Beuselinck et al., 2010). They also suggest that harmonisation of accounting standards does not improve analysts' ability to learn from inter-firm comparisons, as accounting comparability does not increase for IFRS adopters (Lang et al., 2010). On the other hand, there has been an increase in foreign investors in IFRS firms, which would not have occurred if comparability between these firms had not increased (DeFond et al., 2011).

Finally, researchers have examined the mean of countries' and firms' results to enable better assessments of the harmonisation process. The literature suggests that analysts' forecasts are more accurate since the official adoption of IFRS in the EU (Brown et al., 2009), while the cost of equity is lower under IFRS, especially for countries with strong legal enforcement (Li, 2010), as this correlates with reduced earnings management in both private and public firms (Burgstahler et al., 2006). However, in relation to sother countries beside the EU that have adopted IFRS, recent studies again reveal mixed results depending on the countries' characteristics. In some countries, reporting quality has increased and earnings management levels have decreased for companies under IFRS (Cai et al., 2008; Ji and Lu, 2014), while in other cases IFRS have failed to increase the quality of accounting data outside the EU (Khanagha, 2011).

1.4.4 IFRS in the US

The process of harmonising accounting standards is an important aspect of globalisation. Thus, following the successful introduction of IFRS, the next step may be reconciliation with US GAAP (Schipper, 2005). This would further increase the

transparency, consistency and comparability of accounting numbers around the globe. The reconciliation approach that has been implemented seem to be the most effective process, in terms of time and cost, in moving toward complete convergence. Indeed, an increasing number of studies have focused on this fact. These insist that US GAAP is not superior to IFRS regarding value relevance (Bartov et al., 2005), and suggest that US GAAP does not produce higher quality information than IFRS (Leuz, 2003). Thus, they argue that US GAAP is not superior to IFRS, at least outside the US (Bartov et al., 2005). In the US, however, researchers are likely to be more sceptical of IFRS. The results indicate that US investors prefer accounting methods that conform more closely to US GAAP (Bradshaw et al., 2004), even for foreign firms in the US (Harris and Muller, 1999), despite the fact that some findings suggest that in the crucial earnings domain, US GAAP have less explanatory power than IFRS (Ashbaugh and Olson, 2002).

However, previous experience indicates that any form of harmonisation between two strong regimes may be more complicated than anticipated, creating considerable difficulties. Indeed, some researchers disagree with the idea of harmonisation (Sunder, 2002, 2007), arguing that accounting standards should operate under competition. This will allow investors to choose between firms that report under different regimes, placing a higher value on firms that report under a set of high-quality accounting standards. Similarly, responsible authorities would prefer to focus on the development and evolution of accurate regimes to attract investors and reduce firms' cost of capital (Huddart et al., 1999). Furthermore, there is a need for changes to tax strategies and dividend policies, while all the general adjustments required for IFRS implementation (Jermakowicz and Gornik-Tomaszewski, 2006) will increase transaction and operating costs, affecting firms' financial performance. In addition, there are concerns about the timing of this venture, as many consider that the reconciliation option may result in a delay to the convergence process (Street and Linthicum, 2007). Finally, this venture may not only affect the US market, but Europe as well. This is because, in adopting IFRS, the US would have a significant influence on them and would be able to make changes according to its own needs. Since the IASB would have less power in the US, this institutional isolation might lead to the development of different sets of IFRS standards for the US market, while investors would perceive it as one common set (Ball, 2006).

1.4.5 Current issues

As observed in Section 1.1, creative accounting is a problem for all accounting regimes. This phenomenon becomes more intense during economic downturns (Jones and Oldroyd, 2009), as in the last financial crisis in 2008, when the first victim was accounting regulations (Hughes, 2009). Both IFRS and US GAAP came under scrutiny, so a growing body of literature has examined references to complaints of accounting misconduct, which increased significantly during the credit crisis (Johnson, 2008). Indeed, many studies accuse both IFRS and US GAAP of failing to foresee the crisis, and have focused on their fair value orientation as a reason for them not responding appropriately to the crisis (Wallison, 2008a, 2008b; Whalen, 2008). Other researchers suggest that an immediate relaxation of capital requirements may have been a solution (Laux and Leuz, 2009).

However, in addition to blaming accounting standards, many studies have examined the performance of the banking sector following the outbreak of the crisis. The literature has focused on the role played by banking and shadow banking in the financial crisis, owing to their elaborate financial measures and vagueness in accounting figures (Heilpern et al., 2009; Lewis, 2009). The shadow banking system consists of institutions such as investment banks and hedge funds that are not subject to the same regulations as commercial banks. They provide services and activities that are fully or partially outside the regular banking system (Claessens et al., 2012). These institutions tried to compete globally, but the results proved that the market participants were unprepared for this step (Claessens et al., 2012; Jackson, 2013). Consequently, their fragility increased (Basu, 2003), and authorities therefore initiated new regulations. Most researchers claim that regulating the capital structure might preserve it from any future crisis (Gorton and Metrick, 2010), as it would reduce inaccuracies (Cole, 2012).

1.5 Aims and Objectives

This research is concerned primarily with experiences following IFRS adoption in Greece. Based on the background and existing literature, my goal was to critically evaluate the introduction of IFRS in Greece by investigating stock market reactions to events surrounding the official adoption period. These events triggered debatable results; therefore, I aimed to contribute to the literature by examining problems that needed to be answered for both financial professionals and academics. Although

public opinion tends to be positive, in many cases, empirical research has failed to confirm increased transparency and comparability of accounting figures under IFRS. Even when positive economic consequences have been identified, concerns remain about whether these might be attributable to factors other than IFRS (Brüggemann et al., 2013).

For this reason, I focused on the transition to IFRS from the old GAAP, meaning the national regimes to which countries previously adhered. Focusing on earnings management, insider trading and the cost of equity, I applied both national regimes and IFRS to a set of emerging issues. In this way, I was able to critically explore and assess the effectiveness of IFRS against creative accounting techniques and cases of fraud. I also aimed to provide appropriate means for accounting professionals to detect large-scale instances of fraud, as well as the characteristics of firms that have used such methods. Therefore, through critical data analysis based on statistical methods and models, I sought to capture and investigate a range of previously unquestioned experiences. Indeed, my applied empirical analysis models provide critical evidence and interpretations of earnings management cases. However, such studies may lack comparability because they focus on a single country. Therefore, I aimed to use the same proxies and apply the same models to countries other than Greece. I sought to compare the performance of Greece against other indicative countries, such as Australia, Germany, the UK and the US. Details of the sample selection are provided in Section 1.7. In this way, I aimed to illuminate country risk and determine whether IFRS performs better in weaker countries, such as Greece. Thus, I compared Greece with a country that used to follow a different regime (the UK), with an economy with a similar accounting philosophy (Germany), and with a country that follows IFRS values but has its own accounting board (Australia). This would reveal the extent of harmonisation between different countries that follow IFRS.

As most accounting researchers consider that a single accounting system enables high levels of accounting harmonisation, since IFRS adoption, they have taken harmonisation for granted. However, I aimed to provide rich empirical evidence that might problematise this belief. In turn, this would lead to extensive research on current thinking about the introduction of IFRS in the US. The research sought to critically evaluate the underpinnings of IFRS introduction and analyse IFRS performance in the US market, and provide an in-depth examination of important

attributes, patterns and interactions that followed this implementation. In this way, I would be able to evaluate the extent to which decisions by the US and the EU have influenced the internationalisation of accounting regimes. Hoping that my research would enrich the results of these decisions, I aimed to illuminate aspects of amendments to IFRS and US GAAP in light of the crisis. Finally, focusing on the banking sector, I sought to critically evaluate their reactions, and to question some of their fundamental rules in practice. Overall, my central concern was to highlight critical issues following the official introduction of IFRS in 2005, the adoption of IFRS in the US, and the performance of IFRS during a crisis. In brief, my aims were:

- To explore whether IFRS introduction succeeded in decreasing firms' earnings management
- To review IFRS performance compared with US GAAP
- To establish how IFRS and US GAAP responded to the last economic crisis
- To combine all this information in order to develop a database of characteristics of firms that investors should further evaluate before investing in these companies.

To achieve these aims, the following objectives were pursued:

- To compare Greece's performance with that of other economies following IFRS, and to assess their reactions to falsified statements, auditor changes, insider trading and the cost of capital
- To assess the advantages and disadvantages of IFRS in each examined country compared with their previous national accounting regimes (old GAAP), and the effectiveness of IFRS improvements
- To critically evaluate IFRS implementation in the US, detecting any effects on adopting firms
- To illustrate the consequences of the crisis for financial markets, and to estimate the financial sector's reactions to both IFRS and US GAAP
- To provide recommendations on possible areas for improvement to IFRS, and to suggest a single source of guidance for market professionals based on better correlation of information.

1.6 Initial Research Questions

This project provides useful insights into critical elements of IFRS adoption. I focused on the most interesting issues arising from IFRS, as distilled from the literature and my working experience. In this way, I aimed to answer three broad sets

of questions that defined the general framework and purpose of the study. Although many studies have been conducted on IFRS adoption, ambiguity remains as to whether firms tend to engage less in earnings management and report more accurate accounting values. Previous studies have produced mixed results, and although the transition to IFRS occurred in 2005, debate continues on how firms would have performed under national GAAP. This scepticism was reinforced by the financial crisis, which added greater ambiguity to IFRS implementation. At the same time, new falsified statement estimation methods have been introduced during this period, but no research has applied these to compare old national GAAP with IFRS. Furthermore, a widespread belief with which I concur is that IFRS has not succeeded in dealing with privileged internal information and insider trading. Therefore, there are several issues that authorities need to address in order to eliminate any additional effects of IFRS, including stock market regulations.

Furthermore, most studies have performed earnings management tests that include all sample firms for a year. However, my professional intuition is that firms that apply earnings management techniques do not do so all the time, but for a specific reason and within a discrete time frame. Similarly, research on this period has failed to detect particular standards that are more responsible for earnings management. Finally, most previous literature has discovered a decrease in the cost of capital, but has failed to determine whether this was due entirely to IFRS adoption. Although IFRS provide objective and reliable information, nobody can guarantee that the reduction in the cost of equity is not correlated with increased accruals. Consistent with all these facts, the research addressed the following initial set of research questions.

Q1: Have IFRS succeeded in meeting their target for a high level of transparency following their compulsory adoption in Europe and Australia? To what extent do individual IFRS standards have a material impact on earnings management? How have auditors reacted during this implementation process?

Most studies find that the level of accounting harmonisation has increased considerably following IFRS, despite the differing economic backgrounds of EU countries (Hoarau, 1995; Epps and Oh, 1997). However, this does not indicate that IFRS could be successfully applied in the US. There was thus a need to evaluate IFRS in the US using the same methods as have been used in the EU. The interest was in detecting how they have performed in the crucial field of earnings management, and

what have been the effects on firms' statements following their adoption. This led to the following second set of general questions.

Q2: Have IFRS succeeded in implementing their values and overcoming any difficulties in the US market? Has this venture enhanced the convergence process?

This set of questions is vital for accounting researchers and analysts, allowing them for the first time to compare IFRS performance between Europe and the US, and make better investment evaluations. However, in order to achieve this, I also needed to determine the market and financial effects on reactions of IFRS to the crisis. Indeed, the reclassification option allowed in IFRS opens up a new debate as to whether this option increased the effects of the crisis and information asymmetry, rather than eliminating adverse consequences and protecting firms from abnormal stock market returns. As a market participant, I had not realised why so many researchers have focused on this decision, blaming the fair value orientation of IFRS. In my opinion, this helps both companies and accountants to present a firm's real value, and the IFRS reacted appropriately and in a timely way in allowing the reclassification option. However, apart from this reaction, both IFRS and US GAAP focused on the banking and shadow banking sectors. They amended and/or introduced new individual standards to regulate these sectors and eliminate similar fraudulent auditing cases based on accounting misinterpretations in future (Nieschwietz et al., 2000). This led to the next set of questions as follows.

Q3: Did the fair value orientation actually contribute to the financial crisis through contagion effects? Have these two global accounting regimes succeeded in overcoming the consequences of the crisis? Have amendments and the introduction of new standards to IFRS and US GAAP achieved regulation of shadow banking? Which of the two has performed better?

Table 1 summarises these benchmarks with related research questions.

Table 1: Link between research questions and IFRS milestones

Year	Milestones after ten years of IFRS implementation	Questions
2005	Introduction of IFRS in Europe	Have they eliminated falsified financial statements, insider, trading, and reduced the cost of capital for adopters? Are these results harmonised for all adopting countries?
2007	First IFRS improvements	
2007	Reconciliation between IFRS and US GAAP	Is it the right time to introduce IFRS in the US?
2008	Outbreak of the crisis	How have weaker economies responded?

2011 **2013**	Improvements to IFRS and US GAAP relating to the banking sector	How has IFRS responded compared with US GAAP?

1.7 Data Sample

Accounting studies have traditionally been preoccupied with groups of countries with similar accounting systems (Haller, 2002). Therefore, most research on IFRS implementation has focused on a very narrow sample, for example one country for a few years, or many years for a single country. However, I sought to differentiate and examine different country profiles to prove how a country's cultural, economic and legal environment influences its accounting principles (Frank, 1979; Nair and Frank, 1980). Therefore, I focused on listed firms in Australia, Germany, Greece, the UK and the US. During my professional career, I have worked on listed firms from these countries, giving me insights into their stock exchanges and the necessary competence to find relevant data for my analysis. Thus, this project provided me with an opportunity to examine countries that have a direct effect on my profession, and I was therefore able to apply my findings immediately. However, the selection of these countries was also based on theory. German firms have been the most frequently examined in IFRS studies, and Germany represents a code-law country. It was therefore appropriate to compare Germany with a country from the opposite extreme such as the UK (Nobes and Parker, 2000), and to combine these results with Greece, one of the weakest economies to adopt IFRS in EU.

Australia, on the other hand, was selected for many reasons. First, for many years I had been looking to expand my professional investment in additional stock markets. This project revealed copious literature on Australian companies. Indeed, it seems to have been the first choice for research on non-EU countries, and was one of the first economies to follow Europe's 2005 regulation on obligatory enforcement. Thus, I began to apply my professional analysis to Australian companies. Furthermore, Australia does not follow European IFRS, but the Australian equivalent, International Financial Reporting Standards (A-IFRS), as issued in 2005 by the Australian Accounting Standards Board (AASB). Although this equates to compliance with IFRS, it would be useful to determine whether this compliance remains stable under challenging circumstances. Australia also has close historical, economic, legal and cultural links with the UK (Nair and Frank, 1980). This made my sample more balanced, as Australia and the UK are Anglo-Saxon countries, compared with the

Continental countries of Germany and Greece. Finally, concerning the timeframe and reference years for the study, I focused on the key events shown in Table 1. Based on the literature and my work as a stock analyst, I considered that these years covered the essential period between mandatory IFRS implementation and the present day. This is discussed in greater detail in Chapter 4.

1.8 Significance and Possible Outcomes of the Project

This study examines several issues relating to IFRS adoption and enhances previous literature, shedding light on previously untested problems concerning the consequences of IFRS adoption. In evaluating whether IFRS have performed better than national GAAP, I chose to concentrate on earnings management. On the basis of the literature and my working experience, I concluded that earnings management can be extended to all accounting functions, while the considerable number of studies addressing this issue testiy to its significance. However, following McNichols (2000) and Stolowy and Breton (2004), I determined that most researchers have focused on specific accruals or earnings statistics, seeking to confirm already-known motives and tools for earnings management. These studies have produced mixed results on whether IFRS have eliminated smoothing processes. Through this project, I contribute to this debate in determining further motives and tools for earnings management. This is the first study to seek to correlate earnings management and abnormal returns with falsified statements, insider trading and the cost of capital. However, most importantly, some measures may be transformed from motives into tools, and vice versa. For example, a manager might proceed with earnings management to increase the firm's value and sell its holdings, or an insider might increase his holding to enable him to proceed to earnings management. I also include auditors in this process, and determine whether companies that manage their earnings once will always use such techniques. This question is crucial for market professionals, but until now has remained answered.

In addition, the contribution of this doctoral research project is reflected in the combination of methods used. My analysis includes individual accounting standards, and amendments and/or restatements of accounting values, and I was able to perform not only cross-sectional but also, in some cases, longitudinal examinations of variables, according to the needs of each test. This is an innovative procedure since, to my knowledge, no previous empirical studies in this field have taken a similar

approach. Thus, I extend the IFRS research agenda by identifying interactions between individual IFRS standards and earnings management. In this sense, I contribute to this body of research by examining the overall market impact on earnings quality. This approach allows me to identify an imperative need for further IFRS enforcement. For this reason, I use indicative examples of countries covering a wide range of differences between common law and code law in financial reporting quality (Ball et al., 2000).

Furthermore, in exploring the experience of IFRS in the US, this project contributes to ongoing international debate on enforcement measures for accounting quality and capital markets (Ball et al., 2000; Hung, 2000; DeFond et al., 2007). For this, I evaluate the effects of the reconciliation between IFRS and US GAAP to determine whether IFRS can compete in the US. Following well-established methods (Barth et al., 2008, Daske et al., 2007, 2008), I focus on financial statement effects before and after the introduction of IFRS in the US. As there appears to be increasing scepticism over whether the US Securities and Exchange Commission (SEC) should allow foreign firms to list their securities in the US market without US GAAP reconciliation, the results provide substantial evidence for and interesting contradictions to such claims. Finally, the project contributes to debate on the reactions of both IFRS and US GAAP during and after the economic crisis. For this, I investigate the performance of the financial sector under both regimes, identifying possible additional effects and considerations. However, unlike previous studies that have excluded the banking sector, I examine both the banking and shadow banking sectors. Overall, this project contributes valuable evidence to debates following the introduction of IFRS, and provides a roadmap of necessary amendments to enable these regimes to prevail globally.

This work-based project will be of interest to a broad audience, especially since significant changes to accounting regulations are now being considered[6] and there is increasing concern as to whether accounting professionals can effectively manage adjustments to IFRS. As a practitioner-researcher, I document significant market responses by investigating IFRS adoption from an insider perspective, as a user as well as a researcher. Therefore, professions that may benefit from this research

[6] Indicative cases include the introduction of a new compliance regulation for auditors, a new training framework for accountants concentrating on lifelong educational preparation, and the establishment of new rules as proposed by the EU (2010).

include accountants, auditors and market analysts. Self-employed professionals in this field are at a disadvantage compared with big accounting firms. The latter carry out analysis and research to enhance their performance, while individuals have no access to this information. This research aims to fill this gap by providing appropriate means for self-employed individuals to formulate a framework of characteristics that make firms more prone to fraud, abnormal returns and insider trading. This will provide them with a better understanding of how the accounting regimes perform under certain circumstances, allowing them to focus on and evaluate similar situations and to forecast future crisis events. It is essential for analysts and accountants to be familiar with considerations that may affect a company's economic performance. Having access to all this information will make it easier for accountants to develop, to save time and costs, and to compete with big accounting firms. However, even big corporations may benefit from this research, enabling them to devote their resources to assisting authorities in improving standards.

This project thus delivers the following theoretical and practical outcomes:

- Contributes to existing debate on the effectiveness of IFRS
- Creates awareness of the harmonisation process under IFRS and after the crisis
- Adds knowledge for authorities to deal with earnings management to design their future guidelines successfully
- Helps accountants and market participants understand correlations between earnings management, market performance, insider trading and the cost of capital
- Provides investors with practical suggestions for policy change
- Formulates an investment framework for market participants, based on the financial statements of Australian, German, Greek, British and US listed firms.

1.9 Brief Description of the Methodology

The methodology is the main way to link all major parts of a study to produce a complete project (Mouton, 1996; Myers, 2009). I followed a quantitative methodology, which tends to generate data that can be collected and expressed in numerical form, ready for analysis and statistical presentation (Backman, 1998). As such an approach follows a formal structure, it was suited to the scope of the study to answer the research questions, examine the hypotheses and assess the effectiveness of IFRS. Research may also encompass other methodological approaches that use a common set of procedures to describe and depict the research methodology and better

define the link between the research philosophy and the subsequent choice of methods (Denzin and Lincoln, 2011). I decided to combine an action research approach with an empirical survey. As a professional in the financial field, I considered myself to be an insider in the accounting community. Therefore, the action research approach offered me an opportunity to feed practical concerns into my models, and to detect possible improvements relating to these issues. I aimed to examine specific accounting issues before and after IFRS implementation as part of the general professional accounting context of the research and the change process examined (Coghlan and Brannick, 2005). I formulated three cycles to better assess official adoption of IFRS, its introduction in the US and the effects of the crisis. At the same time, the empirical survey enabled me to apply statistical models in each research cycle. Therefore, I produced systematic sets of data based on highly reliable statistics that could be efficiently coded and processed.

1.10 Structure of the Thesis

This thesis proceeds as follows. Chapter 2 presents the general hypothesis and research questions, and critically evaluates the literature, focusing on essential theories relating to the research. Chapter 3 presents the methodological research design. It explains the rationale for the chosen paradigm, describes the ontological and epistemological considerations of the research and the methodology followed, and sets out the data sampling, collection and analysis methods. It also clarifies the limitations of this study. Chapter 4 focuses on the identification of variables and the primary analysis. It describes in detail the nine hypotheses of the thesis, including the individual tests performed to investigate each one. Chapter 5 presents the results and analysis based on each hypothesis, formulated in such a way as to permit the reader to reach accurate conclusions and comparisons. Chapter 6 summarises the conclusions and considers whether the research plan was successful. It also makes recommendations for further analysis by identifying possible ways to strengthen the IFRS implementation process. Finally, Chapter 7 discusses the implications of the project for my professional learning and development, the impact of the research on the global literature, and the difficulties faced in writing this thesis.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This research relates to the literature on the effects of IFRS introduction in Europe and Australia, engages with the introduction of IFRS in the US, and considers the reactions of both IFRS and US GAAP to the financial crisis. However, to provide valid theories and valuable practical recommendations, additional streams of literature relevant to this study are reviewed in this chapter. Following Haller's (2002) identification of three broad periods of transformation in accounting regimes, the theoretical basis of my project is structured around three sequential phases that trace the evolution of accounting regimes, including IFRS formulation. However, earlier studies are reviewed than those examined by Haller (2002), as researchers have been seeking to identify rules that might link financial statements from different national accounting systems since the 1950s (Chandler, 1992). Therefore, in the first period up to 1994, I review the literature around the first steps taken by the EU to harmonise and globalise through directives. In the second phase, from 1995 to 2003, I consider the first steps in true IAS implementation.

In the third period, which begins from 2004 because some firms adopted IFRS early, I examine IFRS as they operate today, and which I aimed to examine in my research (see Appendix I, Table 2). This is intended to help the reader and myself gain a better understanding of the evolution of IFRS over time, and gives the review greater clarity, separating the periods between directives, IAS and IFRS. Since most researchers review the literature under thematic frameworks, it is difficult for readers to discern whether they refer to IAS or IFRS. For example, Hung and Subramanyam (2007) examined IAS adoption, but many subsequent studies refer to their research as indicative of IFRS implementation, which is inconsistent. Finally, in reviewing the literature, I investigate the critical viewpoints of published researchers, focusing not only on their results but also on their methods, justifications and general applications. This enables determination and evaluation of any methodological limitations, overgeneralisations or omissions. Appendix I, Tables 3 and 4 give further details on this strategy for gathering and evaluating the literature.

2.1 Phase I: Accounting Harmonisation and Globalisation (up to 1994)

As the EU project moved toward completion, it needed to consider improving its accounting rules. Thus, it had to discuss harmonising and globalising its accounting standards. This period reveals the first traces of accounting harmonisation, with the introduction of two significant factors for international accounting: harmonisation through directives from 1989 to 1994, and the introduction of IAS in early 1970. These two processes ran in parallel, but because few papers make a significant statistical contribution to the effect of IAS during this period, this review focuses on the directives, the EU's first step toward harmonisation.

2.1.1 Moving toward harmonisation: Accounting directives

A fundamental consideration of the EU was to develop equality of economic potential. The most important step in achieving this was harmonisation of accounting systems across all member states. Even before 1970, the EU issued several directives aiming to harmonise financial reporting practices and to increase comparability between member states. Undoubtedly the most influential of these guidelines, which established the first framework for accounting regime rules, were the Fourth (Council of the EC, 1978) and Seventh (Council of the EC, 1983) EC Directives, known as Accounting Directives,[7] which all members were obliged to embody in their national laws. Studies of this period have not focused on the rationale for these decisions, since it is normal for enforcement bodies like the EU to intervene in cases of public interest such as the dissemination of information in financial statements to foster capital market growth (Posner, 1974; Taylor and Turley, 1986). Rather, they have provided extensive descriptions of harmonisation and have sought to show the importance of globalising accounting regimes. Thus, both theoretical and empirical studies are included in this part of the literature review.

2.1.1.1 Theoretical considerations in adopting directives

Many researchers have sought to identify and define harmonisation. Research on this period suggests various formal definitions, but Choi and Mueller (1984) explain it

[7] The Fourth Directive regulated the format and valuation of core accounting figures, but its main feature was the requirement for a 'true and fair view' (TFV) of a company's assets, liabilities and income statements. The Seventh Directive addressed issues associated with consolidations of financial accounts, such as auditing and publishing obligations and methods that firms should follow to consolidate their figures.

more broadly as a process that may increase comparability of financial statements on various dimensions. In other words, harmonisation transforms regimes into a single rule in the same situation. In addition, Tay and Parker (1990) emphasise the practical elimination of accounting diversity, and Nobes (1991) suggests that the higher the limitations placed on variations in accounting practices, the better their comparability. Harmonisation remains a process that eliminates diversity in accounting standards (Roberts et al., 2005). However, early papers make a clear distinction between harmonisation, harmony and standardisation (Van Hulle, 1992). Harmony applies when companies have only one rule to follow, so it is described in the literature as 'standardisation'.

Many researchers of this period chose to concentrate on these notions. Gray (1980) was one of the first to focus on the difference between harmonisation and standardisation. He claimed that their difference lies in the forces that lead the process. Thus, he suggested that harmonisation is a process directed by responsible authorities, in this case the EU, whereas standardisation is a process giving managers responsibility for measurement and disclosure. Of course, this approach does not reflect reality because, since the directives, managers and accountants have been obliged to implement the new accounting regulations. Some researchers (e.g. Tay and Parker, 1990; Nobes, 1991; Van der Tas, 1992) tried to engage with these concepts and offered competing views on harmonisation. Nobes (1991) accepted that harmonisation aims to increase financial statements' comparability, whereas standardisation imposes rigid rules. However, he was one of the first to emphasise the methodological difficulties of measuring harmonisation and question the validity of data used to do so (Nobes, 1981), suggesting that any difference between harmonisation and standardisation is difficult to distinguish in practice. He focused instead on improving measurement methods. Similarly, Van der Tas (1992) supported abandoning the distinction between harmonisation and standardisation, and considered it better to consider models to measure the degree of harmonisation. He distinguished between formal and material harmonisation (Van der Tas, 1988). The former refers to official regulations issued by standard setters, while the latter measures actual actions taken by companies.

On the other hand, Tay and Parker (1992) made a clear distinction between the two concepts. Indeed, they defined harmonisation as a process whereby a regulation applies to all associated companies, while standardisation refers to more specific rules

that address only a subset of companies. They also suggested an additional measurement of harmonisation (Tay and Parker, 1990), focusing on actual reporting practices estimated from annual statements. Similarly to Van der Tas (1988), they distinguished between material and formal harmonisation, emphasising the former. These studies may be considered to be more objective than papers from the early 1980s that relied on researchers' interpretations (e.g. Evans and Taylor, 1982). They gained broad acceptance by the accounting community, yet they were still subject to limits caused by sample selection, data sources and the statistical methods applied.

However, these studies were highly ingenious, not so much in their methodology, but because they directed research away from trivial debates between harmonisation and standardisation toward an essential disagreement over how to measure the level of harmonisation. Thus, they revealed that the main problem was not estimating these notions, but measuring harmonisation levels. They moved away from useless debate, and introduced an appropriate path for subsequent researchers. Several indices, such as Benau's (1995) global concentration index and Archer et al.'s (1995) comparability index, have been based on that of Van der Tas, or have contributed to its improvement (e.g. Taplin, 2003) to resolve significant issues. Even recent empirical studies that compare countries' performance following IFRS adoption implicitly estimate harmonisation levels, since in most cases they use comparative indices to analyse any discrepancies in IFRS implementation between countries. For example, Pascual et al. (2002) indicate that more effort is required to achieve harmonisation.

2.1.1.2 Additional considerations in adopting directives

None of these academic studies considered alternative motives for such interference, such as the 'private interest' theory (Stigler, 1971) where the regulator seeks to take advantage of regulated parties. This means that some countries might gain competitive advantage over others on the road to harmonisation. Indeed, incorporating these directives into national laws had different implications for each member state. Consequently, researchers started to focus on these differences and concentrate on the advantages that some countries seemed to possess. As explained in Chapter 1, two systems prevailed in Europe: the Continental/code-law system which has a stakeholder orientation, and the Anglo-Saxon model prevalent in the UK. The latter insists on low levels of regulation and taxes, and low barriers to information for investors in capital markets (Epps and Oh, 1997). Thus, some countries may have be

privileged. Indeed, UK firms already had to adhere to a detailed accounts format by law (Thorell and Whittington, 1994), while in Italy and Spain, firms had only general requirements (Zambon and Saccon, 1993; Giner, 1993). Similarly, the UK and Ireland were familiar with consolidated financial statements, as they had extensive regulations on group accounts even before the Seventh Directive. On the other hand, most European code-law systems (Spain, Belgium, Austria, Italy, Greece and Germany) only offered general regulations, and therefore focused on individual accounts to determine earnings, taxes and dividends (Giner, 1993; Zambon and Saccon, 1993). However, the most prominent argument for any imbalances introduced by the directives was undoubtedly the introduction of the TFV, which is the component of fair value in IFRS. The peculiarity of this principle is that in some countries, as in the UK, it had already been applied some time previously (Alexander, 1993).

New questions then arose. Might TFV adoption result in more advantages for some countries than for others, endangering the harmonisation process? The theoretical literature of this period did not adequately answer this question. Of course, this period may have been too early for such considerations, as in many cases the data were preliminary, yet research seems to have been devoted to other issues, such as the motives of the Danish, Dutch and UK delegations for proposing this regulation (Nobes, 1986), whether TFV was similar to the 'fair presentation' concept of US GAAP (Kirk, 2001), and whether a lack of authoritative interpretation of TFV might lead to disagreement between investors, firms' managers and auditors (Nobes and Parker, 1991; McEnroe and Martens, 1998). In addition, the literature engaged in extensive discussions of the legal, instrumental and political environment relating to the directives (see Walton, 1993). Many researchers focused on confusion about the content of the TFV regulation, as it was interpreted differently in countries' national laws (Van Hulle, 1997). Many others detected political intentions behind the directives' harmonisation, as neither national regulators nor markets were ready to accomplish this (Haller, 1992; Liener, 1992; Evans and Nobes, 1996). Therefore, this cluster of studies seems to conclude that harmonisation of accounting rules was necessary, but that since it had had enormous impacts on all member states, additional procedures needed to be established, although some researchers considered that, with common formal and disclosure regulations, national accounting systems had become similar across the EU (Thorell and Whittington, 1994).

What appears to be missing from this body of literature is any explanation of which countries took advantage of these regulations, over what period, and for how long they might be able to preserve any of these benefits. Similarly, it would have been relevant to define the parameters of their focal determinants as, although these studies had little practical application as they just described a state, they created a solid basis for both theoretical and practical investigations. Thus, they placed additional pressure on the EU Council, resulting in considerable opposition by member states to the application of the directives (Haller and Walton, 2000). This may have temporarily eliminated controversy over the directives (Thorell and Whittington, 1994), but resulted in lower levels of harmonisation.

Similarly, a fair value orientation emerged as the most significant parameter in the harmonisation process. Although this is still a contemporary issue, as fresh debate has arisen since the last financial crisis, in my opinion and based on my professional experience, companies experienced little effect in transforming their assets from historical cost to fair value estimation. Therefore, all these papers lost the opportunity to focus on real issues and establish a framework within which to examine core details relating to the application of the directives, and later IFRS, such as accounting rules versus professional judgment.

2.1.1.3 Practical considerations in adopting directives

Empirical researchers have provided answers to most of the previous questions. This section discusses the effectiveness of the directives in practice. Empirical studies of this period are insufficient, and most consider that these directives did not result in satisfactory levels of comparability and equivalence. Joos and Lang (1994) provided one of the first empirical analyses concerning the effects of the two accounting directives. They compared firms from the UK, France and Germany, concluding that the enactment of the directives did little to help integration of the accounting environment. In other words, there were no significant differences in the accounting data examined prior to and after the introduction of the directives, as Germany still had the most conservative measurement practices, in contrast to the UK, while France was in the middle in most cases. Another important outcome is that they did not detect market advantages for the UK following the implementation of TFV, despite a general belief that the UK would benefit from the EU's decision to move closer to this philosophy. However, these outcomes have been addressed by other researchers.

The noteworthy point of Joos and Lang's (1994) research is their sample selection and statistical process. They analysed three countries, permitting a comparison between two extremes and one intermediate accounting approach. This sample differentiation is most common even in contemporary studies, and is used in my research. Furthermore, as they focused on univariate analyses of financial ratios and stock market valuations of accounting data (Bildersee et al., 1990), they moved away from prevailing comparative indices and were able to focus on separate variables in more detail. For example, for the same sample and the same period of the 1980s, and using Van der Tas's (1988) I-index as described previously, Emenyonu and Gray (1992) also conclude that France, Germany and the UK differed significantly in their performance, and thus the level of harmonisation was relatively low. But how might TFV valuation or consolidated accounts affect these results? Emenyonu and Gray (1992) failed to answer this, but Joos and Lang (1994) identified fair value and book tax as crucial individual harmonisation factors.

However, there were some omissions in their statistical approach, as they acknowledged in their discussion. They suggested viewing some of the coefficient estimates with caution, as there might be cross-correlated residuals, while their conclusion on the comparison of the value relevance of the accounting data should also be treated with care, as the R-squared value is low, raising questions about the accuracy of their model. Further implications that may be closely related to the previous faults are that their study was subject to limited data availability, with no reliable association between returns and earnings, and a long estimation window. The latter may be a disadvantage in such analyses, as explained later. Finally, another questionable point is that they only measured two years of the post-directive period 1988-1990, although Germany had implemented the fourth directive in 1985 (Nobes and Parker, 2006).

Despite these statistical defects, they extended the role of empirical researchers, from assessing the general effectiveness of efforts to increase the level of accounting integration to the useful separate estimation of accounting measurements that might influence the reported data. Harris et al. (1994) extended research on the harmonisation level by performing similar tests, aiming to compare the value relevance of German GAAP with US GAAP before and after the release of the two directives. Consistent with Joos and Lang (1994), they found that the explanatory power for German firms did not increase after the new law's introduction, but US

firms appear to have been privileged by the new directives. Following this route of analysis, some additional studies provided empirical evidence that accounting harmonisation had increased among EU countries since the enforcement in national laws (Canibano and Mora, 2000; Aisbitt, 2001). Nevertheless, this does not negate the results of previous papers indicating that the directives did not provide a satisfactory level of comparability and equivalence, as until 1994, implementation of the directives into national law was influenced by the national policy of each member state (Haller and Walton, 2000, p.37). For example, an exception in the German law in 1985 allowed tax-based accounting even in cases where this conflicted with TFV (Harris et al., 1994).

2.1.2 IAS formulation

While the EU Commission sought to increase levels of harmonisation in members' accounting regimes, the IASC proceeded to compile a set of standards that would improve and harmonise national regimes. Although the IASC was established in 1973, IAS standards were not officially accepted.[8] Of course, any firm could follow them, but it would also have to follow its own national regulations. Only Germany allowed IAS from 1993, while the decision that led to change is described in Section 2.2. As a result, the lack of empirical evidence on their performance is unsurprising. Only Auer (1996) tried to compare the EU directives with IAS in terms of the dissemination of earnings information for a sample of Swiss firms that changed their accounting standards from Swiss GAAP to either IAS or EC directives. Although he found no significant result for increased abnormal returns for firms that followed IAS or the directives, he revealed a considerable increase in the variance of abnormal returns for firms that changed from local GAAP to IAS. As a result, he concluded that more information was available for earnings under IAS and the directives than for Swiss GAAP. However, his mixed outcomes may have resulted from a small sample size (35 companies) and a lack of accurate sample selection procedures, as IAS firms were much larger in market value than firms following the directives.

[8] The original IAS, as established in 1973, were descriptive in nature and proposed many alternative accounting methods. Because of this flexibility, they have been heavily criticised. In response to this criticism, the IASC started a Comparability Project in 1987, aiming to revise the standards to make them more effective. They reduced alternative treatments and increased disclosure requirements (Nobes, 2002), resulting in adoption in 1995.

2.1.3 Globalisation

Previous studies failed to consider the implications of increased globalisation for firms. Indeed, during the 1990s, growing competition drove EU companies to seek global financial and investment activities, so they were listed on US stock markets. Consequently, some EU countries permitted their companies under specific circumstances to prepare their consolidated accounts in accordance with IAS or US GAAP rather than national rules (Mandler, 1996). Given the previous background, the globalisation of capital markets, and not just their harmonisation, appears to have been the driving force behind the regulations that needed to be established, as described in the next section. However, this body of literature should answer a number of interesting questions. Would simply adopting the accounting directives be enough to globalise accounting standards? Do all firms desire globalisation, and why? Might this internationalisation of accounting standards help with their harmonisation, and vice versa?

Most researchers in this period suggested that globalisation of accounting would result in increased transparency and higher-quality financial measures, leading to increased liquidity and lower cost of capital for companies (Choi and Meek, 2005). However, to reach this level, better comparability of financial statements was essential. Choi and Levich (1990) found that more than half of their sample, including the investment decisions of representatives of 51 institutions from Japan, Switzerland, the UK, the US and Germany, were influenced by differences between national and international accounting standards. They preferred the security of international financial figures rather than home-country accounts. Therefore, firms had to increase their accounts' harmonisation with accepted regimes. Harris et al.'s (1994) empirical research comparing US and German GAAP after the directives is particularly interesting. Although their results are somewhat suggestive concerning globalisation and have not been replicated in other studies, this study gives a first indication that the directives did not help firms to compete globally.

However, two key concerns are raised in the literature with regard to IAS implementation. Since firms were allowed to use IAS or US GAAP only for their consolidated accounts, how could they deal with the additional cost of continuing to report under national regimes for their individual accounts? Would this reconciliation between consolidated accounts in IAS or US GAAP and national accounting in individual statements result in essential inconsistencies? In Germany, for example,

accounting choices regarding recognition and measurement could be treated independently between consolidated financial statements and individual accounts. In this period, only a few studies focused on this. Examination of Daimler Benz, which exhibited significant differences in reported earnings between German GAAP and US GAAP, triggered extensive discussion in ensuing years about the consequences of these parallel statements (Bay and Bruns, 2000). On the other hand, most researchers during this period focused on the differing information that could be distilled from different GAAPs. Some researchers found no clear evidence of statistically significant differences in information content between US GAAP and other regimes, yet stated that any reconciliation between national GAAP and US GAAP could be eliminated (Meek, 1991; Pope and Rees, 1993). Their recommendations seem paradoxical and inconsistent with all previous considerations, both in theory and in practice. The US authorities did not accept IFRS without reconciliations until 2006, and this is still the only regime allowed.

2.1.4 Gaps in the first period of literature

Overall, this period gave rise to most of the core issues and concepts addressed by researchers from the beginning of international accounting until the recent IFRS implementation considerations. Theory on harmonisation and globalisation was at a preliminary stage, so researchers focused on limited considerations. However, critical theoretical concerns were raised, and empirical studies established an appropriate pathway for methods that are still in use today. Of course, additional cases might have been examined, such as any fraudulent auditing cases after the implementation of the directives, but the available samples and data appear not to have offered such opportunities. Such issues are discussed in the next phases, as in the ensuing period it seems that, after the EU's final decision to move globally and allow IAS without reconciliation to national GAAP, more data became available to enable researchers to evaluate IAS and the disadvantages or disadvantages of harmonisation.

Finally, it should be clarified that in reviewing globalisation, I refrained from using the international classification tables that prevailed during this period. This approach was introduced by Mueller (1967), who grouped countries according to four distinct patterns (macroeconomic, microeconomic, independent discipline and uniformity of accounting) of similar reporting systems. Many researchers adopted similar practices and formulated their own classifications (Nobes, 1983; Nair and

Frank, 1980), but both in this and the following phases, I chose to separate and critically evaluate the literature based on real facts, such as the TFV regulation and better-specified systems like the Anglo-Saxon and Continental models, as described above.

2.2 Phase II: IAS and International Accounting (1995-2003)

2.2.1 Official acceptance of IAS

During this phase, there was considerable pressure from global companies that urgently needed to transform the *de facto* harmonisation process in practice that had dominated in the previous phase, into *de jure* harmony, meaning common regulations that countries would be required to follow. The directives appear to have been insufficient, as they introduced a general framework for change in accounting and cross-border activities, but did not address the challenge in international accounting to create global financial integration (Schuetze, 1994; Biener, 1994; Cairns, 1994). Furthermore, as previously described, their efficiency in contributing to a cost-effective, transparent and comparable financial reporting system was questioned. For this reason, the EC, as a regulatory body, decided to react, and in 1995 it established 'Accounting Harmonization: A New Strategy vis-à-vis International Harmonization' (EC, 1995). This programme introduced measures that would allow listed companies to prepare their consolidated financial statements in accordance with IAS or US GAAP (Van Hulle, 1996), with no need to follow national rules. This increased its influence over IAS improvements, establishing an enforcement process that would address the needs of member states (Lopez, 2000).

Companies were thus allowed to prepare a single set of statements, not only at the European level but internationally if possible (Canibano and Mora, 2000). However, member states reacted differently to this decision. Some countries, like Germany, implemented a regulation in their national laws that excluded listed companies from the obligation to comply with domestic regimes if they chose to follow IAS or US GAAP. However, other member states decided to develop national rules closely related to IAS, forcing their companies to follow these national rules.[9] Countries that followed the new legislation seemed to differ from countries facilitating IAS. Most

[9] There is a difference between harmonisation and convergence of accounting rules. In this research, they are considered to be equivalent; however, many insist that there are slight differences (Chandler, 1992), as harmonisation involves a 'leader' and a 'follower'. A standard setter (leader), like the IASB, will design accounting rules and then permit reconciliations (followers).

companies using IAS were from Germany and Switzerland (Dumontier and Raffournier, 2003), while in the UK and Ireland, voluntary adoption of IAS was almost non-existent (Haller, 2002; Cuijpers and Buijink, 2005). This may have led to sample bias in the statistical calculations of papers that examined the performance of IAS during this period.

However, a considerable amount of research dealt with the impact of IAS on financial statements, as well as moving beyond this. These studies answered several crucial questions following official acceptance of IAS. For example, did they provide evidence of better information content compared with the directives? Why was harmonisation necessary for Europe? Had it succeeded? Had all countries performed equally? As mentioned previously, the UK had different accounting priorities from Germany, and such inconsistency in national environments might have had serious economic consequences (Tang, 1994). Indeed, studies of this period revealed the advantages that IAS brought to the harmonisation process and other influential factors that they had to overcome, such as taxation, national regulations, the socio-economic environment and managerial behaviour (Choi and Levich, 1991). Therefore, the catalyst for harmonisation anticipated by international firms appears to have been acceptance of IAS. Following this decision, the focus of research attention moved to the effects of IAS implementation on levels of harmonisation (Emenyonu and Gray, 1996; Murphy, 2000) and their appropriateness (Cairns, 1997; Flower, 1997). Of course, the main body of literature for this period focused on comparisons between IAS, US GAAP and national GAAP.

2.2.2 Harmonisation effects under IAS

On the basis of all previous information, harmonisation of accounting practices appears to have been essential for three key reasons: to eliminate obstacles to investment within the common market; to protect shareholders and investors; and above all to equalise conditions under which firms could reveal their financials truthfully, without worrying that this would weaken their position in a competitive environment (Flower, 1997). On the other hand, some opinions and views in the literature made questionable contributions to the academic dialogue. For example, Tang (1994) considered accounting harmonisation as resulting from pressure by organisations such as the IASB and countries such as the US. His analysis seems limited, as he unveiled no advantages to the US. Nobes (1995) rejected such

explanations, focusing instead on motives for the harmonisation process. Nevertheless, during this period, research focused on determining the advantages and disadvantages of harmonisation, the difficulty of this venture, and whether any countries managed to gain competitive advantage.

2.2.2.1 Advantages of adopting harmonised standards

A key question that arose while searching for literature on harmonisation and accounting standards was why should countries and/or a companies harmonise their regulations? Proponents of harmonisation suggested many reasons. Even during the previous phase, researchers had identified potential benefits for firms, mainly multinationals, as it would lower the cost of consolidated accounts and facilitate their management processes (Mason, 1978). Cecchini (1988) was the first to quantify these benefits, indicating that diversity in reporting and taxation between European countries might raise administrative expenses for global multinational companies by between 10 and 30 per cent.

Although these assumptions seem commonplace today, these two studies were innovative at the time, and many other studies of this period confirmed their belief that harmonisation is necessary for the globalisation of accounting markets, and that standard rules are essential for companies to increase the comparability of their financial statements and compete worldwide. It reduces their accounting costs because they use the same methods of calculation for their financials in all markets in which they operate, simultaneously increasing transparency. They even benefit from cost savings, as they no longer have to translate their accounting information (Brown and Tarca, 2001). Consequently, potential investors are able to make decisions based on more accurate and comparable data (Turner, 1983; Tan, 1996). This will increase investors' interest in companies, thereby improving their stock market performance. Therefore, by adhering to international regimes, they will gain increased access to credit, an important factor especially for firms that need capital (Forschle et al., 1998).

It is essential for companies to diversify their approach to investors by not limiting their options to local capital markets. Indeed, through regime harmonisation, they may satisfy their funding needs by approaching not only foreign investors, but also different categories of investors, such as pension funds (Flower, 1997) and insurance companies. In this way, they will reduce their premium-risk investors, and thereby decrease their cost of capital (Leuz and Verrecchia, 2000; Saudagaran and Meek,

1997; Choi and Mueller, 1992). Of course, to earn interest, they need to exhibit strict investment plans and procedures and long-term investment strategies, adhere to legal restrictions and provide accurate financial information.

These are the most important direct benefits of and motivations for harmonisation distilled from the literature. However, these findings were also replicated in practice, as my professional experience was that during this phase many firms, even smaller firms in weaker economies like Greece, started to take their first steps toward globalisation. Indeed, the harmonisation process offered them improved transparency, better comparability of financial reporting, and lower preparation and capital costs (Choi and Meek, 2005). This is important, because the perception had been that the financial statements of small and medium-sized enterprises were designed mainly for the company's higher management (Hussey and Hussey, 1997) or for local use by creditors and tax authorities (Chaveau et al., 1996). However, the results of harmonisation should make companies consider following the accounting rules more closely to take advantage of and trigger interest in their financials by external users.

Researchers also examined less direct benefits for firms that decided to change to international regimes. These studies focused on the operating business objectives. For example, Kagermann (1999) considered that harmonisation may be a means for companies to accomplish strategic steps. Researchers proposed that harmonisation bolsters sales and improves brand names, giving better access to new markets (Pellens, 2001). Firms may also expand their group of stakeholders by communicating their economic position to stakeholders other than investors, such as clients, suppliers and business partners (Pellens, 2001). Finally, it was argued that harmonisation may be beneficial to international merger transactions (Black et al., 2004), as well as facilitating communications with local authorities (Siepmann, 2000).

2.2.2.2 Disadvantages of adopting harmonised standards

Many considered that preparing a set of accounting figures under a single regime is better than having to follow more rules, as the latter may lead to deviation from the estimation of core assets (Haller, 2002). This argument was consistent with the perspective of papers in the previous phase, that financial statements which must be restated for other regimes lose their originality (Mueller, 1967; Choi, 1980). On the other hand, Barth et al. (1999) found that harmonisation is a result of interactions between two forces: direct informational effects, which depend on whether

harmonisation increases or decreases the precision of the regime, and the benefits and costs for foreign investors to become familiar with the harmonised standards. Because of this interaction, they concluded that harmonisation is not a desirable singular goal. This led to my realisation that these studies failed to consider another important question: whom do these factors benefit? Although many studies did not specifically say so, they appeared to be addressed to multinational companies. Thus, they seemed to generalise their results, forgetting to calculate and compare the increased costs for smaller companies following the harmonisation process. They considered all countries as being on a similar economic level, contrary to reality. Thus, they proved that harmonisation is preferred by multinational corporations and major public auditing firms (Cook, 1989; Choi and Levich, 1990).

However, many insisted that all firms should take steps toward harmonisation. For example, McMahon (2001) sampled companies from Australia, and showed that small companies with high growth rates have a greater need to divulge and disseminate financial information. However, he failed to estimate whether the additional managerial and accounting expenses would make them more economically secure or more vulnerable. Although many thought that the need to access capital markets would increase the trend toward harmonisation (Taplin et al., 2002), a large body of later literature suggested that it was unnecessary for firms to adopt harmonised regulations. Since most firms disclosed information voluntarily, analysts should focus on the content of such information (Baginski et al., 2004). Opponents of harmonisation supported this notion and noted that differentiating between countries was necessary, as companies' financial information was already adequate. Therefore any efforts to eliminate such disparities would not be cost-effective. In this context, studies needed to quantify the additional expenses incurred by companies and countries to conclude whether the costs of harmonisation outweighed the benefits, considering the unique circumstances of each firm and country. Therefore, Nobes's (1998) identification of characteristics of countries with similar accounting needs, as described previously, was particularly important.

Indeed, opponents of harmonisation adduced evidence of differentiation between harmonised countries. IAS, as well as other reporting systems such as US and UK GAAP, were considered to be capital market-oriented systems, meaning that they aimed to supply information to investors and were independent of tax reporting considerations. In contrast, the traditional accounting systems of continental Europe,

as used by German, French and Greek GAAP, were characterised by creditor protection, offering extensive information oriented toward profit distribution and tax-reporting requirements, which was less informative for investors (Breker et al., 1999; Niehus and Thyll, 2000). Thus, these two systems obviously had different requirements, but as the new (IAS) harmonised standards had market-oriented values, countries like Germany might have problems depicting their financial information to traditional accounting users who used independent financial criteria (Goeltz, 1996). Consequently, after harmonisation, information asymmetry might increase in countries with this accounting background (Ball et al., 2000). Similarly, implementing an investor-oriented regime in countries where the likely users are tax authorities, owners and lenders may be inappropriate. Previous studies raised such concerns. For example, Nobes (1998) suggested that, given that auditors and accountants are accustomed to analysing and interpreting accounting information based on previous regimes, it would be difficult for them to implement something entirely different. These researchers approached the subject from a different angle and seemed to challenge the simple assumption that adopting a harmonised system would be advantageous and offer sufficient motivation even to companies that were used to a different system (Horvath and Arnaout, 1997; Kubin, 1998).

Finally, several studies focused on whether harmonisation might lead to more efficient cost reduction (Street et al., 1999). In this respect, I considered whether some companies might have preferred not to adjust their figures, but were obliged to do so because of their lack of independence. For example, companies might be required to reconcile their accounts with those of their parent company, and developing countries regarded as ‘accounting colonials’ might be forced to harmonise with standards used by developed countries (Chandler, 1992). Many researchers suggested that, in such cases, firms’ financial reporting might be suboptimal if they had to follow regulations that were inappropriate for them (Rahman et al., 2002). For this reason, Sunder (2002) argued that it was better to allow firms to choose freely between compelling sets of regimes, rather than forcing them to apply one predetermined system. They would choose according to their needs, reducing their capital costs, while competition between systems would enhance accounting quality. Dye (2002) moved a step further to model the probability of the success of accounting regimes based on different standard setters.

However, these studies are only of theoretical interest, as they failed to consider the long-term effects and practical extensions of such proposals. They may have been influenced by similar studies of stock markets, such as that of Huddart et al. (1999), yet accounting regulations should not be compared with stock market rules. Companies are allowed to list their shares on any stock market they want, but it would be impracticable for them to choose between accounting regimes. This might result in opposite effects from the harmonisation process, especially for medium-sized companies (Larson and Street, 2004). Even Vansteeger (2005), who supports harmonisation, lists significant issues that must be overcome in order to harmonise without cost (Roberts et al., 1996; Brown and Tarca, 2001). The best way to do this is to focus on the empirical evidence on accounting harmonisation through IAS, as described in the next sections.

2.2.3 IAS adoption

This section focuses on the practical implications of IAS, as distilled from firms' voluntary adoption. From the beginning of the IAS endorsement, studies aimed to confirm the quality of the new standards (Zarzeski, 1996). Papers from this period used various sample countries, which in some cases led to mixed results with limited evidence. Some researchers considered that financials would be more transparent under IAS (Ashbaugh., 2001; Leuz and Verrecchia, 2000), helping companies to attract investors (Weibenberger, 2002). Similarly, Swiss companies (Murphy, 1999) under IAS had higher foreign sales and could be listed more easily on foreign exchanges. El-Gazzar et al. (1999) obtained similar results for various countries, and concluded that EU countries with a lower debt-to-equity ratio were positively associated with IAS adoption. On the other hand, results for German (Hung and Subramanyam, 2004; Bartov et al., 2004; Van Tendeloo and Vanstraelen, 2005) and Chinese (Eccher and Healy, 2003) companies provided mixed evidence on whether applying IAS improved accounting quality. In addition, Comprix et al., (2003) found little evidence of a significant market reaction to such events. Other researchers approached IAS adoption through analysts' forecast errors, which they considered extremely important as these errors reflected the quality of accounting figures (Ashbaugh and Pincus, 2001). Hence, in adopting IAS, which required greater disclosure and allowed less accounting measurement rules, analysts should be better prepared to predict firms' earnings.

Lang and Lundholm (1996) posited that analysts' forecast accuracy would improve as firms' disclosure levels increased, and tried to find statistically reliable models to examine this. Although these studies considered several endogenous factors that might impact on analysts' ability to predict firms' earnings, they failed to estimate the measurement flexibility that remained in light of the stringency of IAS in this respect (Davis-Friday and Rueschoff, 1998). Furthermore, they failed to consider that changing accounting policies might impair analysts' ability to estimate firms' earnings (Elliott and Philbrick, 1990), while such changes might always hide earnings management, as described below. These studies established initial motives for future research, but were questioned by other analyses (Barth et al., 2005; Ashbaugh and Pincus, 2001) as they focused on very limited or very heterogeneous groups of firms.

To further support this view, most studies examined a single country or stock exchange. Few studies compared peer groups of companies under their new reporting sets (Ordelheide, 1998; Auer, 1999); thus, as Pownall and Schipper (1999) noted, the results might vary across empirical specifications, time periods and firm samples. This means that the results for a country in this period might not be replicated for other countries, indicating that the results were not comparable and were thus inconclusive on IAS performance. Furthermore, some companies followed IAS without fulfilling all the required obligations. Street and Gray (2002) detect a significant number of these firms, especially cases that failed to implement the IAS disclosure requirements. This is another essential consideration relating to sample bias, as in many studies, these firms formed part of the IAS sample, but did not fully follow IAS.

More recent studies solve this problem (Ball et al., 2003), but do not include in their results the accounting amendments released by standards setters. This is critical, and for this reason, research has not been conducted on individual standards. Of course, it is not only the sample selection that limits the reliability of estimates of the impact of IAS adoption; false comparisons are also problematic. For example, studies of Polish firms under IAS found that Poland had a traditional accounting system (Krzywda et al., 1995), so they compared it with other code-law countries such as Germany. They failed to recognise significant differences in political functions, history (Obloj and Kostera, 1993; Wilczynski, 1996) and accountants' education (Jaruga et al., 1996). Based on such assessments, studies of this period failed to explain the reasons for the findings.

Despite their inconsistencies and regardless of the arguments for and against harmonisation, previous studies proved that IAS development substantially increased harmonisation. Thus, a key question following IAS adoption is to what extent the new accounting practices achieved their scope for one regime. The level of accounting harmonisation and the success of IAS will depend on necessary reforms aimed not only at reducing differences between national accounting standards and IAS, but also at making changes to related factors, such as the national taxation systems of each country. IAS have attractive qualitative characteristics, but their relevance, reliability and comparability must be confirmed through empirical assessments.

Taking all these aspects into consideration, I investigated the literature further to identify studies of value relevance, fair value, taxation differences and elimination of earnings management, because accounting standards *per se* have little potential to succeed if they do not cooperate with other regulations contained within international accounting. These are also the most frequently examined aspects of IAS implementation.

2.2.4 Value relevance

This section reviews studies that examined IAS, including additional parameters to those of previous studies that aimed to measure the quality of harmonised regimes. These papers estimated quality in terms of relevance and reliability (Schippe and Vincent, 2003). The primary purpose of accounting is to offer a company's information to the public, from investors and tax authorities to everyone interested. Relevant information will enable outsiders to assess a firm's financial prospects, but it must be useful and reliable, accurately reflecting the company's economic value. In other words, it must be value relevant. A vast body of literature has addressed the value relevance of IAS, making it the most examined concept of IAS and IFRS implementation. More than a thousand studies had referred to it by 2001 (Kothari, 2001). However, differences between the methods and samples used to evaluate and compare the new standards regarding value relevance have led to mixed results once again. Early studies postulated the legal environment as a crucial factor in value relevance (LaPorta et al., 1999). Following this approach, many researchers classified their samples between common-law and code-law countries, and observed that the former performed better than the latter in relation to value relevance, on reported accounting numbers such as earnings (Ball et al., 2000; Guenther and Young, 2000;

Ali and Hwang, 2000). They justified their conclusion by suggesting that in common-law countries managers have less flexibility in reporting financials.

Similarly, Hung (2001) analysed a sample of firms from 21 different countries and found low value relevance of financial statements in countries with little shareholder protection. Thus, it could be concluded that Germany, as a low shareholder protection country, would produce information with low value relevance. Indeed, Bartov et al. (2005), who examined the value relevance of German GAAP, IAS and US GAAP for Germany's stock exchange-listed firms, concluded that earnings were more value relevant under IAS than under German GAAP. They also found no difference between IAS and US GAAP. On the other hand, these findings are inconsistent with those of Hung and Subramanyam (2007), who also examined the impact of IAS adoption in Germany. Among other things, they also compared value relevance between IAS and German GAAP. For this purpose, they used a sample of firms that had voluntarily adopted IAS in Germany, and concluded that there was no difference in the value relevance of the book value of equity and earnings under IAS and German GAAP. Similarly, Niskanen et al. (2000) examined the value relevance of Finnish GAAP compared with IAS, based on earnings. Their results also indicated no significant increase in value relevance to either domestic or foreign investors.

Although these studies used conventional methods, they reached different conclusions. However, it seems that in all cases IAS performed at least as well as national GAAP. This is also consistent with Daske's (2006) finding. After using several stock valuation models, he failed to support a decrease in the cost of equity for IAS in Germany. Theory suggests that information asymmetry is positively associated with the cost of capital (Easley and O'Hara, 2004; Lamber at al., 2007). Thus, low cost and low asymmetry should lead to higher value relevance. On the contrary, more recent studies suggest that IAS result in higher-quality financials than local GAAP (Barth et al., 2005; Leuz and Verrecchia, 2000) but not US GAAP. Although, as previously described, Bartov et al. (2005) and Leuz and Verrecchia (2000) find that both sets of standards provide similar information asymmetries, and are thus of equal value relevance, Harris and Muller (1999) and Barth et al. (2005, 2006) argue that accounting reports under US GAAP are more value relevant than under IAS. Nevertheless, consistent with a KPMG survey, Leuz (2003) claims that firms, especially those interested in raising their funding prospects, will prefer to follow US GAAP.

As noted previously, some studies based their results on examining the relationship between financial statements and capital markets. These are known as capital market studies, and they mainly investigated earnings response coefficients, including market efficiency tests and analysts' forecasts (Kothari, 2001). Other studies examined the relationship between specific accounting figures and equity market values, aiming to predict a significant relationship between the two. Holthausen and Watts (2001) categorise these studies into three types,[10] but their critical review is more important, as they were the first to critically assess the body of value relevant literature. In brief, they consider that such studies failed to specify the individuals for whom the information is value relevant, and employed stock prices for their models, which shaped the accuracy of the results, as stock prices are affected by factors other than accounting information (Holthausen and Watts, 2001; Sloan, 1999).

In relation to their first point, it is important for studies to refer to whom the accounting standards will be value relevant, such as investors or authorities, because each need different information, but the accounting framework is specific. Few researchers have considered this. An exception is Niskanen et al. (2000), who divided investors into external and internal to consider their different needs. Relating to Holthausen and Watts's (2001) second critical point, as previously described, they considered that stock prices represent the aggregation of individual investors' valuations. Thus, they did not consider each individual investor, and could not reflect on accounting amounts, as the prices were affected by other factors. Although in some cases stock prices fail to depict a company's fair value, they do not appear to have considered the ease of information transactions within the stock market and earnings management. The first grants every single interesting part of accounting information access to market prices. Furthermore, the stock market has two privileged advantages that I have experienced. It can adjust its prices in seconds by combining large amounts of information, which accounting cannot do, and it can be manipulated only

[10] Holthausen and Watts's (2001) three types of value-relevant research are: (a) relative association studies researching the association between market values or changes and financial reporting numbers for different GAAP over long estimation windows (e.g. Beaver and Dukes, 1972; Harris and Ohlson, 1987; Vincent, 1999; Bartov et al., 2005; these studies are also referred to in the literature as direct valuation studies); (b) incremental association studies that investigate individual financial statement numbers to explain market capitalisations or changes thereto, along with other financial values over long windows (e.g. Barth, 1991, 1994; Barth et al., 1996; Nelson, 1996; Choi et al., 1997; Ayers, 1998); and (c) marginal information studies that explore the association between prices and abnormal market capitalisation changes over short estimation windows, usually around the date when the financial reporting data are published (Auer, 1996).

for a short period, as there are many adjustment mechanisms. In contrast, through earnings management techniques, financials may be misleading for years. Consider, for example, the Globo case described in Chapter 1, where it was the stock price that revealed the truth to authorities, managers and everyone else. In this case, financial statements revealed nothing, but the stock price was value relevant for all. In this respect, in my opinion, the stock price proxy for value-relevant evaluation is a prudent benchmark that captures all public value-relevant information.

The literature review also raised methodological issues in some studies, with the sample being the most common. For example, Bartov et al. (2005) excluded loss-making firm observations from their estimations, whereas Hung and Subramanyam (2007) included them in their study. However, the latter limited their examination to only a year before IAS adoption, whereas Bartov et al.'s sample (2005) was more extensive and included all German listed firms from 1990 to 2000. On the other hand, while these two studies focused on German companies to observe the effects of IAS adoption, Barth et al.'s (2005) analysis included a broader set of countries.

Researchers should also pay close attention to variables and model selections. Most studies use the Ohlson model (Ohlson, 1991; Ohlson, 1995; Feltham and Ohlson, 1995) to regress book values and net income with price or returns (changes in prices). Many insist that price specification is better than returns specification (Kothari and Zimmerman, 1995), but the crucial point is for researchers to stipulate that the share price is linear with earnings and equity book value, given a dividend valuation model and clean surplus accounting (Ohlson, 1991). Thus, any omission in the accounting or market variables may raise questions about the linearity of their relationship and lead to mis-specified models. This may explain the failure of book value in Bartov et al.'s (2005) regression model. They needed to adjust their models to take into account the accounting measure, and country-level specific factors that might affect their results (Sun, 2006), as pricing mechanisms and the information environment differ across firms and countries (Bushman et al., 2004). Overall, value relevance appears to be an essential concept for IAS, and has been extensively debated and examined.

2.2.5 Fair value

The fair value orientation of IAS means that companies must re-evaluate their assets based on their market value rather than their historical cost. Appendix I, Table

5 describes the individual standards that are subject to fair value. The rationale for the fair value concept is to increase the reliability of financial statements. It estimates that assessing a firm's assets at market value gives all the company's interested parties a clearer view of the company's financials. Thus, it is another means for IAS to increase value relevance and eliminate earnings management. The greatest change is that, in most cases, any difference between the residual value (the asset value after depreciation, if any is applicable) and the market value must be transferred into equity as a loss (impairment) or gain (impairment reversal). Thus, it has a direct effect on firms' equity, whereas in the past this process involved profit and loss statements. In other words, firms under fair value are more vulnerable to changes in the market value of assets, which may easily change the companies' evaluation and value. This fact, along with other changes introduced by IAS/IFRS such as the introduction of a discrete category for investment assets that are not subject to depreciation, set the framework for a fair value orientation.

It appears that IAS was not the first regime to adopt this method. US GAAP had already followed the fair value option. The results were not promising, as the market had not responded as expected (Beatty et al., 1996). Abad et al. (2000) and Niskanen et al. (1998) argued that fair-value consolidated financial statements are more value-relevant than individual statements. Furthermore, Eccher et al.'s (1996) examination of the banking sector in the US found that only fair value disclosures for investment securities are value-relevant. Several studies also focused on IAS, examining the value-relevance of fair value disclosures. Barth (1994) was the first to provide evidence of this. She tested how share prices reflect historical costs and fair values of assets and compared the results. She provided evidence that fair values of banks' investment securities was relevant and reliable for investors, offering more informational content than historical costs. However, she also found that a combination of two annual fair-value estimates used to calculate securities gains and losses was value-irrelevant. In a later study, Barth et al. (1996) provided more information and stated that the fair values of loans, securities and long-term debt were all of incremental value-relevance over notional estimations. Venkatachalam (1996) added that derivatives also have incremental explanatory power for book values, while Nelson (1996) stated that only fair values of investment securities are value-relevant. It is thus obvious that fair value may enhance the accuracy of information, as it provides an option for timely information. However, it is too soon to draw safe

conclusions. Future researchers must determine whether market prices objectively depict assets' value or may be materially influenced by managers. Moreover, they should observe the volatility that is always introduced when firms change from mark-to-model to mark-to-market methods, and estimate the effect of fair value on equity gains or losses.

2.2.6 Taxation

One of the greatest concerns in the harmonisation process were differences in taxation between countries. In some countries, this was so important that it overrode even fair value in the new accounting standards (Kosmala-MacLullich, 2003). Nobes and Schwencke (2006) suggest that many studies examined the connection between tax and financial reporting (p.64), and it appears that most writers in this period considered the connection between taxation and accounting to be strong (Doupnik and Salter, 1995; Choi et al., 2002; Radebaugh and Gray, 2002). Although some argued that this influence had reduced over time (Kinserdal, 1995), no specific details were provided. However, the literature does not give common assessments of tax reporting linkages. Many studies considered that there was the need to contrast financial reporting systems, as they were responsible for the differences (Roberts, 1995), whereas others considered financial reporting differences to be a cause of tax differentiation (Nobes, 1998). Hoogendoorn (1996) was one of the first to summarise the results from 13 European countries, but his examination conflated additional issues with tax reporting connections, so it is difficult to interpret his results. On the other hand, Lamb et al. (1998) revealed that some countries' financial reporting may be less tax-influenced than others. They argued that UK and US financial reporting is less tax-influenced than German reporting, whereas the French position lies in the middle. Their sample consisted of four countries, which was sufficient since their research followed the classification between common- and code-law countries. The UK and the US are normally presented as countries that have a low connection between taxation and accounting regimes, as they intend mainly to provide useful information to investors. Consequently, in these countries, tax rules never prevail over financial reporting, contrary to countries such as Germany where, as previously mentioned, tax information dominates (Haller, 1992; Nobes, 1998). A key question relates to the nature of the framework under IAS. Early indications considered that, as IAS follow the same route as US GAAP and the old UK regime, they would have less

connection with tax regulation. For example, Germany displayed weak tax correlation for its firms' consolidated reports using IAS (Haller, 1992).

On the other hand, accounting and stock market practitioners know that the operational connection between tax and financial reporting is overwhelming, even in cases where it is reduced. Indeed, following IAS adoption, countries retained their national tax sovereignty, leading to significant disharmony. This calls the harmonisation process into question, as it creates imperfect competition for firms and contagion effects for accounting standards. An indicative example is deferred taxes. In most cases, financial income is different from tax income. For example, in Greece, tax authorities have their own depreciation proportion that firms must follow, contrary to IFRS which allows greater elasticity. Consequently, depreciation affects earnings, and thus there is a tax-base difference. This is known as deferred taxes and results from the need for book-tax conformity. This is a crucial matter that still affects companies, especially in the banking sector. Deferred taxes exist under all regimes, but IAS, as well as US GAAP, eliminate tax conformity and increase deferred tax. This is why deferred tax is the most frequently adjusted item in transitioning from German GAAP to IAS (Hung and Subramanyam, 2007).

Therefore, studies needed to investigate whether this differentiation might increase companies' motivation to engage in earnings management. Few studies focused on this. Healy and Wahlen (1999) reviewed studies by Visvanathan (1998), Miller and Skinner (1998) and Ayers (1998), and concluded (pp.13-14) that there was little evidence of a correlation between earnings management and deferred taxes. They also criticised these studies for not combining their analysis with circumstances that might increase the need for earnings management, such as analysts' forecasts. However, in my opinion, if they had addressed these issues, the results would still not have indicated a direct correlation between taxation and income-smoothing activities. Other studies for this period denoted that the higher the link between regimes and taxes, the lower the quality of accounting standards (Guenther and Young, 2000).

As a practitioner, the approaches of these studies appear to have been oversimplified, and therefore failed to consider two significant motives. First, without going into technical details, differentiating between the book value of the carrying amount and the tax basis may create deferred tax assets or liabilities. This may help

companies that need to increase their assets, so may be subject to manipulation.[11] Thus, I concur with recent findings that tax compliance reduces earnings management (Haw et al., 2004). Furthermore, tax rates differ between countries. Companies that have equal accounting earnings but have to pay more tax may lose their competitive advantage in a common market. Consequently, a high tax rate is a motive for companies to hide their profits in financial reporting, even if they have to manage their earnings (Burgstahler et al., 2007). This may impact on companies' resource allocations and may result in different preferences for dividend distributions (Hietala and Keloharju, 1995), with knock-on effects on investors. Therefore, I would be cautious about stating that taxation is not related to earnings smoothing.

2.2.7 Earnings management

Since the global accounting scandals, an increasing volume of literature has focused on earnings management. Earnings management is intentional interference with financial reports to obtain some private gain (Schipper, 1989). Of course, changing a company's financials requires access and motive. According to Healy and Wahlen (1999), managers usually use their positions to alter financial reports and transactions, aiming to bring about the desired level of reported earnings and mislead stakeholders and/or shareholders about the company's economic performance. Therefore, it is easily inferred that earnings management is a form of fraud and has nothing to do with reporting errors. The term is not new, and was first used extensively in studies of US companies, notably that of Jones (1991). By developing a discretionary accruals model to measure earnings management, she proved that companies had strong incentives to reduce their earnings during import relief investigations.

She confirmed a correlation between discretionary accounting accruals and influenced reported earnings, and thus a correlation between discretionary accounting

[11] An example is the banking sector during the crisis. Deferred tax assets (DTA) are instruments that may be used by a company to reduce the amount of future tax obligations. Although this is normally contingent only on future profits, many countries took advantage of this regulation to increase the capital of their banking institutes and comply with the capital requirement regulations (CRR) of the Basel Accord. Based on their national tax regulations, they transformed DTA into deferred tax credits (DTC), which are not contingent only on future profits, but count as capital regardless of whether the firm reports a profit or a loss. As a result, many participants asked for further clarification concerning their actions (e.g. https://www.bis.org/publ/bcbs165/ernstyoung.pdf). At the same time, this appears to have resulted in amendments to IAS 12. For more detail, see http://www.ifrs.org/Current-Projects/IASB-Projects/Recognition-of-Deferred-Tax-Assets-for-Unrealised-Losses/Documents/Amendments-to-IAS-12-January-2016.pdf.

accruals and earnings management. Her models and methods were referenced in many subsequent studies, and are still used by many researchers as an indication of earnings quality (Dechow et al., 2010). Many later papers confirmed this managerial drift toward using earnings manipulation in cases where they sought to disorient stakeholders. Burgstahler and Dichev (1997b) confirmed the use of earnings management by firms that aimed to avoid publishing earnings decreases or small losses. Another interesting observation was documented by Teoh et al. (1998a, 1998b), who reported that before events for which companies need funding, such as IPOs or SEOs,[12] earnings management increases. The most remarkable point in these studies is not the earnings management results, but Jones's (1991) changes to the statistical modelling of earnings management.

In this vein, research on accruals grew significantly, and almost all studies focused on earnings management following Jones's (1991) model or a variation of it. At the same time, many researchers started to determine whether IAS were associated with higher or lower earnings management by examining managers' behaviour in Australia, Europe and other countries. This is an important concept for IAS/IFRS that has practical considerations and extensions (Dechow and Skinner, 2000). The first indications from the literature were again mixed. Van Tendeloo and Vanstraelen (2005) argued that German companies exhibited the same earnings management behaviour after IAS adoption. In contrast, Barth et al. (2006) found that firms under IAS exhibited more discretionary accruals and a lower correlation between accruals and cash flows. However, Van Tendello and Vanstraelen's (2005) empirical tests should be interpreted with caution, because they considered only 636 firm-year observations from 1999 to 2001, and re-evaluated fixed assets under IAS to employ an accruals model based on Jones (1991). This may have introduced measurement errors (Aboody et al., 1999). Thus, once again, it may have been too early for IAS to provide high-quality accounting information, and the absence of other determinants, such as legal enforcement, investor protection regulations and countries' different cultural environments (Leuz et al., 2003; Nabar and Boonlert-U-Thai, 2007), may have been crucial factors.

As an accountant, I had had to deal with many management cases, and in this study, I aimed to examine other methods of earnings management on which the global

[12] An IPO is an initial public offering of shares before the company enters a stock market, and an SEO is a seasoned or secondary equity offering that increases the company's capital.

literature has not yet shed light, as described in the next phase. First, the literature needs to provide answers to how managers succeed in their intentions and what are the motives behind their decisions. Concerning the first question, the literature provides little detail. However, in practice, earnings management involves an increase or decrease in revenues and earnings. In their review of the earnings management literature, Healy and Wahlen (1999) summarised the most important techniques that managers can use to exercise judgment and influence reported earnings, whether or not based on specific accounting methods. Such cases depicted in companies' financials may involve future estimations of pension and employment benefits, as well as other economic events, the salvage values of long-term assets, their expected life, depreciation methods and impairments, inventory cost methods, and factors other than accounting processes, such as suspicious partnerships or subsidiary creations. Therefore, managers have many tools to manipulate their earnings according to their needs. However, the literature focused mainly on motivations for earnings management.

A growing body of literature focused on such motives, including the need to meet company forecasts (Kasznik, 1999) or analyst forecasts (Burgstahler and Eames, 1998) to avoid debt covenant violations (Defond and Jiambalvo, 1994), to maximise their bonuses (Watts and Zimmerman, 1978), to increase their companies' market performance (Graham et al., 2005), or to protect the company's ownership (Perry and Williams, 1994). Finally, some researchers focused on earnings management procedures arising from political costs (Maydew, 1997; Han and Wang, 1998) and takeover and merger settings. Most studies prior to IAS adoption focused on this last category, and very few on the post-implementation period. Combining information from the reviews by Koumanakos et al. (2005) and Healy and Wahlen (1999), most such studies appear to have concluded that, prior to the announcement of a takeover attempt, managers are more likely to engage in income-increasing accounting methods (North and O'Connel, 2002; Louis, 2004). However, other researchers failed to support this evidence, including Eddey and Taylor's (1999) examination of a sample of 43 takeovers of Australian companies, and Erickson and Wang's (1999) focus on specific industries in other countries. Aspects meriting further discussion are considered in the next sub-sections.

2.2.7.1 Capital market motivations and analysts' forecasts

The literature suggests that managers may engage in earnings management to influence short-term stock price performance, and consider what would create earnings for the company and how it might do this. As discussed previously, an increase in market value has many advantages, especially in cases around capital market events, such as buyouts, equity offers and IPOs. In such cases, managers overstate or underestimate earnings to meet their purposes, using various methods (Dye, 1988). However, studies of this period failed to provide compelling evidence of financial accounts being managed. Only a few researchers, such as Teoh et al. (1998), found that companies followed depreciation and debt allowance policies that would affect the firm's income during the IPO year and for several subsequent years. Nevertheless, many questions have been raised about these authors' sample selection, as it seemed to maximise the likelihood of detecting earnings management. Other studies focused on banking and insurance companies, examining cases that might relate to critical assets and liabilities. A number of them detected that loan loss reserves for banks depended on management judgment, and thus could be used for earnings management purposes. However, other studies found no strong evidence to support this view (Collins et al., 1995; Liu et al., 1997). On the other hand, studies that examined casualty insurance loss reserves found evidence of earnings management, but were unclear whether this was intended to affect stock market performance (Petroni and Wahlen, 1995). Closely related to market performance are analysts' predictions, which many studies used to evaluate the quality of IAS. However, this seems also to be a motivation for earnings management. Early studies failed to find a significant correlation between future returns and analysts' forecasts (Abarbanell and Bernard, 1992), but in my working experience, whenever a company announces earnings that meet or surpass analysts' consensus estimates, its market performance increases.

Indeed, Bartov et al. (2002) found that such firms produce higher stock returns, around three per cent higher over the quarter than similar firms that fail to meet analysts' estimations. Therefore, companies are under huge pressure to meet these expectations, even if they have to proceed to earnings management (Schonfeld, 1998). Several studies confirmed this opinion and produced evidence that many firms would use accruals to increase their earnings if they were in danger of failing to meet analysts' financial forecasts (Burgstahler and Eames, 1998; Bushee, 1998; Kasznik,

1999). On the other hand, many considered earnings management to be of no use under any case, as they questioned the characteristics and accuracy of analysts' estimates. Abarbanell and Bushee (1998), aiming to expand Penman's (1991) study, concluded that analysts are unable to depict all financial statement information in their reports. Of course, this is natural, as analysts cannot access companies' financials; but it remains a disadvantage because investors may thus not fully utilise the reflections in their reports (Elgers at al., 2003). However, there are indications that earnings manipulation may lead to contrary results. For example, in studies surrounding equity issues, as described previously, firms with income-smoothing activities, underperformed (Teoh et al., 1998b). It seems, therefore, that earnings management relates to stock market performance, since by increasing their earnings, companies may attract investors and improve their market performance. However, no evidence has been found for the opposite effect, where managers might speculate on market prices and thus improve a company's financials.

2.2.7.2 Contractual motivations

Theory distinguishes two contractual cases that may attract earnings management procedures: managers' compensation and debt covenants. Both provide a fertile ground for research. Indeed, several studies have examined executives' compensation contracts to identify potential earnings management incentives. In most cases, managers tend to be awarded extra bonuses based on reported earnings. The literature suggests that managers are likely to manipulate companies' income when earnings targets have not been met, in order to achieve the maximum permitted bonuses (Hand and Skantz, 1998).

Although Gaver et al. (1995) considered that these results might be methodological effects of the studies, Holthausen et al. (1995) moved a step further to discover that it is crucial for managers to remain between the lower and upper bounds designed by the bonus plan. Thus, they showed that firms with an upper limit on bonus awards are more likely to use earnings management so as not to exceed the bonus cap than firms with no bonus limit. Nevertheless, these studies provided no evidence on which accruals are most likely to be managed. More recent studies of this period confirmed this correlation between earnings management and bonuses, as they argued that executives behave in this way in order to improve their reputation, career prospects and job security (Shuto, 2007). With regard to debt contracts, theory

suggests that, in order to avoid this violation, firms manipulate their financials. I avoid referring to dividend contracts because older studies argued that companies prefer simply to meet the dividend constraint by cutting dividends rather than using accruals (DeAngelo et al., 1992). However, debt is a crucial factor in a firm's performance, while violation may result in several negative issues. It will increase volatility in accounting measures and ratios, such as liquidity, worsening the firm's economic position and possibly even leading to bankruptcy (DeFond and Jiambalvo, 1994; Sweeney, 1994). In addition, it will result in the firm finding it more difficult to obtain financing, which will be subject to more burdensome terms (Doukas et al., 2005), and it will also send a negative signal of corporate performance, affecting both the company's stock behaviour and managers' reputation (Holthausen et al., 1995).

The literature implies that firms have huge incentives for avoiding violation of a lending contract, including through earnings management. DeFond and Jiambalvo (1994) and Sweeney (1994) examined a sample of firms that had violated their debt covenants. DeFond and Jiambalvo (1994) stated that firms smoothed their earnings one year prior to the violation, whereas Sweeney (1994) found that firms increased their income only after the violation. Many consider this evidence to be mixed, but in my professional experience, managers tend to engage in earnings management long before the violation if the firm has experienced a recent financial difficulty or is close to doing so. In this case, Sweeney (1994) examined the companies' intentions to reduce the likelihood of future covenant violations (Fields et al., 2001) and not to avoid defaulting on the previous violation. She also found that the frequency of using earnings management for loan reasons was low in a random sample, but this was a generalisation, as she focused only on firms that had violated loan covenants.

It seems, therefore, that lending contracts are a crucial factor, as an increasing number of studies consider that the leading economic function of financial reporting should be to facilitate creditors (Ball, 2006). Creditors not only pay great attention to accounting numbers, but have also started to implement additional control methods to counteract managerial incentives to manipulate their reports. More specifically, they are moving beyond traditional ways of measuring a firm's health and viability. Bankers tend to require more guarantees for loans, excluding intangibles and including goodwill from the net asset base of corporate borrowers (Day and Taylor, 1997). Citron (1992) and Moir (2001) provided evidence from the UK, arguing that in order to reduce any earnings management effects, creditors require information in

addition to balance sheet numbers, such as profit and loss accounts and cash flow statements.

2.2.7.3 Regulatory motivations and auditors

The final category of motives for earnings management distilled from this literature review relates to regulatory motivations and auditors. One of the most important industry regulations that all countries maintain is a minimum capital requirement for a firm to operate in a market. Many companies that are close to this limit and aiming to avoid authorities' inspections may smooth their accounting numbers. Therefore, there is considerable evidence that, in such cases, firms engage in earnings management to keep their equity above the nominal limit (Beatty et al., 1995; Adiel, 1996). In this way, they avoid legal procedures such as capital increases, but also shun auditors. On the other hand, studies of this period failed to answer whether regulatory motives for earnings management might be widespread in other companies as well, because the number of firms sampled in their research was relatively small, limiting the applicability of their results.

Furthermore, apart from public authorities, companies are obliged to have their financials examined by auditors, who reduce the probability of firms mis-stating their financials. Any deviation from the rules to avoid lower capital limits will be detected by the firms' auditors. Failure to do so indicates that the auditors are too lenient, or lack knowledge and training. Studies of this phase categorised auditors based on their reputation and size (Big 4 and non-Big 4) to examine the extent to which constraints on earnings management are a measure of audit quality. In this respect, most studies claimed that Big 4 companies constrain earnings management (DeFond and Jiambalvo, 1994; Becker et al., 1998; Francis et al., 1999; Gore et al., 2001). However, these studies did not consider whether existing regulations on forensic accounting were sufficiently strong to control firms under IAS, and whether auditors were sufficiently well trained to deal with the new regimes.

2.2.8 Gaps in the second period of literature

In this body of literature, a plethora of studies evaluated IAS following their official acceptance. This review has sought to address the main issues in each area of focus. Previous literature has found mixed results on the effectiveness of IAS, but in general, there is a reduction in information asymmetry, lower earnings management,

lower costs of capital and lower forecast errors compared with national GAAP. However, most studies examined only a sample of firms or countries, so their results must be combined with additional information in order to draw useful conclusions. Therefore, if a study provides evidence that IAS are more value-relevant for a country than old GAAP, and at the same time another study indicates that for the same period this country increased its earnings management, it can be inferred that the effectiveness of the new standard is questionable, as earnings management goes against the value relevance concept.

However, what appears to be lacking is any explanation of how IAS may overcome any harmonisation deficits attributable to this correlation in real time. Some business parties have privileged information over others, and this information asymmetry may be used for earnings management purposes. However, from my experience as a practitioner in this field, when companies are obliged to publish their financials, this information favours insiders. Thus, even if authorities subsequently detect such cases, time will already have passed. This is a considerable issue that has many implications, but no studies have been identified that examine these issues. They need to retrospectively examine financials two or more years before, and of course focus on an event window around the announcement. On the other hand, this requires a large amount of information that in some cases cannot be accessed. Detecting earnings management is never easy.

The review of this phase of the literature suggests that there were several important considerations following IAS introduction that needed to be examined, which unfortunately have yet to be observed in the third phase. Overall, the next phase offers opportunities to identify whether concerns about IAS have been transferred to IFRS.

2.3 Phase III: Official IFRS Implementation (2004 onwards)

As mentioned in Chapter 1, from 2005 under EC Regulation No 1606/2002, all listed firms in the EU were required to formulate their financials under IFRS. Europe thus aimed to establish a single set of financial reports for all public companies, hoping to improve the quality, comparability and transparency of financial statements (Soderstrom and Sun, 2007). The IFRS values resulted from the previous IAS standards, with several amendments and new inputs (Appendix I, Table 6). Along with the EU, other countries such as Australia also required their listed firms to report

under IFRS from 2005. In addition, many countries, including Japan, were positive about adopting IFRS in the future, while the US established a convergence plan with IFRS, as described in the next sub-sections. This justifies the fact that most studies have focused on the EU, Australia and the US.

This appears to have been a complicated process, although it might have been expected that countries would have been well-prepared as a result of the previous IAS implementation. However, they still had to overcome considerable problems, including technical difficulties (Sucher and Alexander, 2002), statement effects and compliance under the new enforcement and regulations. This review focuses not on technical details but on the statement and market effects of IFRS under several conditions. Following Soderstrom and Sun's (2007) conclusions and based on the previous literature of Phase II, it was expected that IFRS introduction would be a positive step for global accounting. However, these earlier studies showed increasing debate between academics over the efficiency of IAS, while they lacked significant samples, as only 15 per cent of EU companies had adopted IAS by 2002 (PwC, 2002). Official adoption opened up the potential for more interesting and accurate research results, as the samples would consist of all listed firms. Therefore, the literature review in this phase seeks to establish whether IFRS managed to overcome these complications.

2.3.1 General findings after official adoption

Following official IFRS adoption, most studies have focused on the effects of IFRS, aiming to compare them with the old national GAAP. Using the same accepted tests as in the previous period, enhanced with more countries and more recent years of reference, these studies offer interesting information about the effects of IFRS implementation. Most focus on Europe, examining differences in performance between European countries following IFRS introduction, but taking different approaches. Many examine a single country. Aisbitt (2006) indicates that there has been no difference in equity between UK GAAP and IFRS for bigger UK companies. Similarly, Christensen et al. (2007) state that IFRS adoption has not benefited all UK companies, while Horton and Serafeim (2006) confirm Aisbitt's (2006) finding in concluding that IFRS adoption is value-relevant for earnings but not for equity. These studies seem to separate their samples in the same way, leading to common conclusions. For example, Horton and Serafeim (2006) only examine 85 companies

listed in the UK with high capitalisation. One difference is that most studies consider the average impact of their examined measures, while Aisbitt (2006) also considers the individual performance of her measures, such as retirement benefit obligations and PPE. This reveals differences between IFRS and UK GAAP.

Similarly, Spanish listed companies seem not to have experienced considerable improvements in their reporting after IFRS (Callao et al., 2007), while in some countries there seem to be considerable transaction costs that may affect companies' performance (De Jong et al., 2006). On the other hand, Cordazzo (2008) states that IFRS adoption has been positive for earnings and capital for Italian listed firms, and Cordeiro et al. (2007) argue that, in general, under IFRS Portuguese firms have improved their financials, mainly due to the effects of fair value. However, the latter only examined 39 industrial companies, making generalisation risky. In all cases, researchers focus mainly on equity and earnings, two of the most indicative and important accounting financials on which all market professionals focus. They provide indications of the performance of IFRS during the mandatory adoption, but only reveal average stock market effects, whereas the results reveal many variations between countries.

For this reason, other studies focus on sets of countries, enabling them to better describe any homogeneity or heterogeneity resulting from the introduction of IFRS. For this reason, some researchers enhance their classification criteria to examine countries that have adopted IFRS (e.g. Leuz, 2010; Nobes, 2008, 2011; Sellhorn and Gornik-Tomaszewski, 2006). O'Connell and Sullivan (2008) analyse a group of firms listed in the FTS EuroFirst 80 index. They focus on this index as it includes the biggest companies in Europe, while they exclude UK and Irish companies as they aimed to analyse the remaining countries as members of Continental Europe with common previous accounting values. Their study demonstrates an increase in net income, but no significant impact of IFRS. Furthermore, their sample also includes banking companies which, as revealed in the previous phases, may affect the results. Similarly, Ferrer et al. (2008) analyse the impact of IFRS adoption for a set of 11 European countries. They include both code-law and common-law countries, and conclude that IFRS had a material impact in the UK, Ireland, Sweden, France and Spain, relating mainly to fixed and current assets, short-term liabilities and earnings.

Daske et al.'s (2008) study of IFRS adoption focuses on a sample of 26 countries globally. This study reports interesting results and makes significant contributions.

They find that IFRS adopters increase their market liquidity, but the results for a decrease in their cost of capital are unclear. However, they believe that both outcomes cannot have resulted only from IFRS adoption *per se*, but that additional enforcement may have had an effect. They show that both liquidity and cost of capital improved in countries with strong legal systems. Thus, they conclude that firms' reporting quality is a result of many factors, and that one of the biggest factors is the institutional system of the country adopting IFRS. This conclusion was also reached by studies in the previous phase, as well as by Jackson and Roe (2009) who refer to a positive correlation between strong enforcement and market performance. In addition, Byard et al. (2011) state that the legal system influences analysts' forecast errors, and claim that earnings disclosures provide better information under IFRS for countries that have strong legal systems. Similarly, Horton et al. (2013) state that analysts' forecasts have improved under IFRS, but their results may have been affected by the industry and country on which they focus in their analysis. It seems, therefore, that although IFRS values are common, their implementation differs according to the legal framework of each country. This may partially explain the heterogeneity of results exhibited following IFRS adoption (Christensen et al., 2013).

Most studies of this period show continuity with the previous phase. In fact, in examining IFRS performance, most papers in this phase follow the statistical and empirical methods of analysis previously described, and the data samples are similar to the IAS phase. Most researchers have sought to determine the effects and performance of firms under IFRS compared with old GAAP, and to correlate specific accounting values to examine fair value, cost of capital, value relevance and earnings management, in order to determine the level of categorisation and harmonisation following official adoption. These core issues were also analysed under IAS, and the same mixed results are observed under IFRS. Of course, this does not mean that the literature following IFRS adoption concentrates exclusively on these issues. Indeed, researchers have broadened their sample target to consider, for example, developing countries and IFRS adoption (Lasmin, 2011; Ismail et al., 2013; Suadiye, 2017) and countries adopting IFRS for the first time, such as Canada (Khan et al., 2017).

Furthermore, there is a growing consensus on the need to determine the effects of a common accounting framework on unlisted firms, as distilled from the work of Mantzari et al. (2017) for Greek unlisted firms and Devi and Samujh (2015) for small and medium-sized enterprises. Their conclusions are highly significant, depicting an

evolution of global accounting theory, as they use methodologies other than statistical models, and provide additional samples. However, such cases provide only early indications, so satisfactory data are not yet available. In this case, unlisted firms in Greece have been required to follow IFRS since 2015. Therefore, their performance cannot be compared with that of listed or unlisted firms from other countries that have yet to embody IFRS values in their national regimes. For this reason, such samples were excluded from my project. Furthermore, reviewing the literature on developing countries or countries that have not officially followed IFRS would result in estimations rather than accurate conclusions about the effectiveness of IFRS adoption.

For this reason, and since my project relies on this phase of the literature review, I concentrated on studies closely related to my research. In this respect, I reviewed papers that examine the association between IFRS and accounting quality and investigate specific incentives and tools between financials and accounting quality. Furthermore, as discussed in the previous sections, accounting quality and accuracy may be evaluated using several interchangeable methods, such as earnings management, so I chose to concentrate on the incentives for this measure, and how it might affect quality following IFRS adoption. As already mentioned, the higher the level of earnings management, the lower the quality. Furthermore, potential earnings management cases were the first that I examined in my professional work. Consequently, through this review, I was able to address all streams of the literature, while considering one of the most interesting issues most closely related to my project and my professional career. This enabled me to better detect how IFRS studies have evolved compared with IAS, to determine whether they have used the same methods, to combine their results, and finally, as they relate closely to my research, to better detect any gaps in the literature. As a result, this review concentrates on the impact of IFRS transition on listed companies, as depicted by earnings management, its implementation effects in the US, and its correspondence with the crisis.

2.3.2 Earnings management under IFRS: Early indications

In several countries, firms had already been applying IFRS voluntarily before 2005, always in compliance with their national regulations. For example, the Greek government allowed IFRS for listed firms from 2003 onwards. Therefore, this section reviews cases of early adoption to detect any economic consequences for firms that adopted IFRS earlier, as they may provide some first insights into the effect of the

obligatory transition. In this period, early or voluntary adopters refer to IFRS adopters. These firms differ from the voluntary adopters examined in the previous phase in relation to IAS adoption. Nevertheless, studies of IFRS early adopters are limited for two reasons. First, most researchers exclude them to avoid sample bias. Second, few studies focus purely on early adoption of IFRS, as most refer to early IFRS, but simply expand IAS adoption as part of their general analysis. Of course, the general values and philosophy of IFRS and IAS are the same, yet these studies do not provide clear evidence of the impact of IFRS introduction. For instance, Barth et al. (2008) and Jermakowicz et al. (2007) cover a period including both IAS and IFRS data, which makes it difficult to interpret their results on the impact of IFRS specifically. For this reason, such studies have been criticised for heterogeneity, as they combine IAS and IFRS without refining this information (Daske et al., 2007).

Nevertheless, several studies do examine early IFRS adopters. The most important are those of Daske et al. (2008) and Capkun et al. (2011), whose frameworks categorise early adopters and examine them in parallel with their main analysis. Daske et al. (2008) were the first to consider a separate category for early adopters. As mentioned in the previous sub-section, they produce interesting results for mandatory adopters, but also suggest that voluntary adopters may display lower information asymmetry resulting from the increased transparency of IFRS. Following a similar categorisation, Capkun et al. (2011) did not consider such cases in their 2008 study, but state that early adopters exhibit an increase in earnings management. This finding is contrary to that of Daske et al. (2008), and seems extremely important, as most studies conclude that early adopters did not need to engage in earnings management as they voluntarily adopted IFRS. Furthermore, the statistical accuracy of these studies is questionable. Indeed, both use the same models for their sample, separated into early and normal adopters. However, their sample seems narrow, as early adopters tended to be bigger firms and were considerably fewer in number than normal adopters, raising additional heterogeneity issues.

Overall, these early indications pose many ambiguities, as they are affected by statistical bias. In addition, similarly to the voluntary early adoption of firms, the official period included voluntary adoption of standards. Indeed, in 2005 firms were allowed to partially adopt some individual IFRS standards. IFRS 1 describes the general framework of procedures that firms must follow as first-time adopters. This may affect their first adoption process, because some firms may take advantage of this

procedure and deviate from some rules, resulting in a significant impact on their performance. Many studies focus on these cases (e.g. Cazavan-Jeny and Jeanjean, 2009), and Barth et al. (2011) summarise these exemptions and recognise that most firms prefer to be exempted from IAS 21 (Cumulative Translation Differences) and IFRS 3 (Business Combinations). They suggest that this may result in distortion of their reported profits. All these findings prove the appropriateness of my choice to review IFRS and IAS adoption separately, providing greater confidence in the methods, samples and time periods used by researchers. This allows better formulation of opinions on IFRS implementation with the least possible confusion. Early indications are important, but more accurate results are provided by mandatory implementations of IFRS, as revealed in more recent studies. The next sub-sections move on to review the results of official adoption.

2.3.3 Earnings management under IFRS

My expertise as a market analyst indicates that managers are under considerable pressure to prove that they can increase stakeholders' profits, and may resort to creative accounting practices. Previous literature on IAS suggests debate about the effectiveness of IAS in controlling the motives and tools for earnings management. Given the motives for earnings management discussed in the previous section, recent studies focus on whether managers have changed their policies under IFRS, and whether IFRS are so effective that they reduce the need for earnings management. Thus, studies of this period aim to further distil the tools and motives for earnings management. Better information, greater expertise and more data should enable them to focus on why firms engage in earnings management, yet they seem to follow the same route as in the previous phase, and some factors are not considered at all. Audit quality has been extensively analysed in relation to IAS, but under IFRS, few studies correlate auditors with earnings management. For instance, Francis and Wang (2007) find that firms audited by Big 5 auditors presented better earnings quality than firms with smaller auditors, and Ball et al. (2015) suggest that Australian listed firms may benefit from auditors' rotation.

Further studies reveal a difference in earnings quality across countries that have applied IFRS (Houqe et al., 2012), confirming that legal enforcement in each country may be a reason for this (Doupnik and Perera, 2009). Indeed, similarly to Barth et al. (2012), Chua et al. (2012) state that adoption of IFRS has decreased earnings

management for Australian companies. On the other hand, Ahmed at al. (2013) examine a sample of 20 countries to determine whether IFRS have decreased income-smoothing activities compared with a matched sample of non-IFRS users. They indicate that IFRS adopters have increased earnings management. Also, as their sample includes countries with strong regulations, and as they prove that accounting quality has decreased under IFRS, they conclude that countries with strong laws perform better under their national GAAP. This is the first study to present such indications. However, their analysis is not statistically significant compared with non-IFRS adopters, raising questions about their findings. In addition, Jeanjean and Stolowy (2008) find that earnings-smoothing activities have not declined under IFRS, while in France there is strong evidence of increasing numbers of suspicious cases. Closely related is Djankov et al.'s (2008) research on stock market regulations along with earnings management. They find that large equity markets have better and more restrictive regulations, which may result in less earnings management and more accurate financial reporting.

In addition, Ding et al. (2007) examine how a country's legal system may affect earnings management, even if the country has adopted IFRS. They also conclude that the lower the quality of the legal framework, the greater the opportunities for earnings management. Therefore, adopting IFRS seems likely to increase earnings quality but is not the only determinant, as earnings smoothing appears to relate to additional institutional and market regulations (Isidro et al., 2015; Cascino and Gassen, 2015; Shan, 2015). For example, Ernstberger et al. (2012) show a lower level of earnings management for German firms following improvements to the German enforcement system. Therefore, they state that earnings management may even increase under IFRS if countries do not adopt strict legal and market enforcement (Goldman and Slezak, 2006). On the other hand, Platikanova and Nobes (2006) indicate higher quality for UK and German firms under IFRS and, most impressively and similarly to Armstrong et al. (2007), they state that firms in a lower-quality information environment benefit more. Moreover, many studies focus on motives for earnings management relating to bonuses. Orszag and Choudhary (2005) suggest that most UK listed companies still use earnings to determine managers' bonuses, although many studies find that it has declined since IFRS adoption (Voulgaris et al., 2014).

There is also a threshold in earnings below which there are no bonus distributions, making it even more essential for managers to smooth earnings if a company is close

to this limit. Therefore, reporting a profit is still essential under IFRS (Graham et al., 2005). Furthermore, in recent years, stock markets have tended to play a crucial role in firms meeting analysts' forecasts, and investors' expectations are essential for their operational performance. Failure to reach their estimates may thus have devastating impacts on access to capital, growth prospects and future potential (Graham et al., 2005; Bergstresser and Philippon, 2006). For this reason, firms may be inclined to use earnings management to meet estimates by achieving significant market premiums (Lin et al., 2006; Rees and Sivaramakrishnan, 2007).

This is important for an additional reason. Florou and Kosi (2015) contribute to examining whether IFRS meets creditors' needs. They conclude that under IFRS, firms seem to produce higher-quality and more comparable financials. For this reason, many listed firms issue bonds to take advantage of lower bond yield spreads that investors will pay compared with increased loan spreads. However, their argument is questionable, as similar studies find that firms' debt contacts may be costly, and that their use has decreased since IFRS adoption (Ball et al., 2015; Chen et al., 2015; Brown, 2016). This may suggest that private investors question the effectiveness of IFRS. However, this difference in findings may be attributable to the fact that Florou and Kosi's (2015) sample is limited to before 2008, so they do not consider the crisis period, while other studies include this period. In all cases, more data are required to estimate the long-term effects of IFRS on debt contracting, and it seems that once again countries' regulation may affect this process (Gow et al., 2015; Wu and Zhang, 2017). Overall, in line with the previous phase, there is debate about whether IFRS has succeeded in reducing earnings management.

2.3.4 IFRS reconciliation with US GAAP

From 2007, the SEC allowed foreign firms to report under IFRS in the US. For market participants, this was the first step toward total globalisation of stock markets, and perhaps toward joint improvement of both regimes, but there were many obstacles owing to their differentiation. Although US GAAP are rules-based and IFRS is a principles-based regime, both are considered to be the highest quality accounting standards globally (Van der Meulen et al., 2007). However, apart from their theoretical differentiation, there are also practical considerations. Recent studies focus on these and produce differing results in many respects, for example concerning

accounting quality. Many believe that US GAAP is of higher quality than IFRS (Barth et al., 2006), and that this superiority is reflected in US firms (Barth et al., 2012).

In this regard, the high disclosure level of US GAAP seems to be important. However, this quality of US GAAP is lower in non-SEC environments (Glaum and Street, 2003). Thus, researchers consider that the most effective solution for countries with weak financial disclosure requirements is to adopt IFRS (Ding et al., 2007). The latter seem appropriate in such cases in order to deter auditing irregularities and increase shareholders' confidence (Daske et al. 2008). A country's enforcement system and institutional structure are closely related, as well as its underlying economic and political forces, which may lead to differences in accounting quality (Bushman and Piotroski, 2006). Therefore, the country's profile plays an important role in accounting performance. The same standards in different countries result in different levels of accounting quality (Ball et al., 2003), while in other cases, different standards may result in the same quality. In Germany, for example, there is no evidence of any difference in terms of timeliness, accruals quality or value relevance between US GAAP and IFRS (Van der Meulen et al., 2007).

However, in the US, researchers are likely to be more sceptical toward IFRS, owing to differences such as revenue recognition and write-offs of long-lived asset impairment losses (Trottier, 2013; Gordon and Hsu, 2014; Hong et al., 2018). Some claim that, for this reason, there have been significant increases in foreign firms' cost of equity (Han and He, 2013), while many studies suggest that this may lead to significant capital market effects. Such cases may be sufficient to raise questions about the benefits of introducing IFRS in the US. Indeed, considering the convergence process, there seem to be many practical apprehensions and limitations (Jermakowicz, 2004) that may affect it. Debate began even before the introduction of IFRS in the US. Reconciliation of the two regimes has both benefits and costs, and the potential results are unclear. However, early studies indicate that it may produce significant benefits for investors, and may remove unnecessary costs and barriers for foreign firms listed in the US. Moreover, for foreign registrants required to reconcile with US GAAP, there was a time difference in presenting their annual reports, decreasing information symmetry. Reconciling IFRS and US GAAP has thus increased the comparability of investment opportunities. All these factors are likely to result in increased investor protection (Street and Linthicum, 2007). Similar studies indicate additional potential benefits. In practice, there has been a return to market balance,

and the reconciliation process has not been associated with abnormal trading volumes, abnormal volatility in returns or changes in the bid-ask spread after the release date (Jiang et al., 2010).

Furthermore, there is no evidence that IFRS has changed market liquidity or insider trading after the first implementation year, compared with firms that have not adopted IFRS. The same research indicates that there is no significant impact on the cost of equity, analysts' forecast errors or stock price changes (Kim et al., 2012). Several other studies single out the importance of the convergence process, suggesting that it increases comparability, reduces costs and enhances global competition between financial markets (Ball, 2006). Of course, discussion should concentrate on the value relevance of reconciling IFRS and US GAAP. Many believe that value relevance will decrease following the reconciliation process, resulting in a loss of information. However, the fact that US GAAP are more closely related to IFRS than to the old national GAAP (Ashbaugh, 2001) instils optimism about the venture. Early studies suggest that reconciliation from IFRS to US GAAP is value relevant (Henry et al., 2007), and motivates IFRS in the US to provide informative disclosures, enhancing the integrity of accounting measures (Hansen et al., 2012).

The stricter the enforcement of IFRS, the more willingly companies comply (Street and Gray, 2002), so the strong protection laws and rights in the US (Tendeloo and Vanstraelen, 2005) may be an advantage for their adoption. Indeed, there is a positive correlation between abnormal trading volumes and earnings reconciliation adjustments within a two-day window surrounding the release of the reconciliation, suggesting that investors rely on reconciliation information to make valuation decisions (Chen and Sami, 2013). Similarly, Chen and Khurana (2015) document a positive market reaction for firms adopting IFRS. On the other hand, Lin et al. (2013) argue that under IFRS, earnings management has increased. However, their results are based on a sample of German high-tech firms that transitioned to IFRS from US GAAP in 2005, so their results are of questionable applicability to all IFRS firms in the US. Overall, firms must overcome technical differences, the cost of change and volatility resulting from IFRS adoption.

2.3.5 IFRS and US GAAP during the last financial crisis

The 2008 financial crisis proved to be a critical point for market participants, as it increased suspicion of companies' financials and raised criticisms of accounting

regimes. Indeed, many studies blame accounting standards for not foreseeing the crisis, raising concerns about the global sustainability of the financial reporting system. Once again, they focus on and accuse fair value orientation for the crisis, but not for the market reaction nor the straight comparison between US GAAP and IFRS. It seems, therefore, that a new debate has arisen about the causes and effects of fair value, which increase under turbulent conditions (Mallet, 2008). Although fair value rules are not ideal, many insist nonetheless that they are by far the most appropriate method compared with any alternatives, providing much greater transparency and comparability (Brown, 2008). They claim that there is still more timely loss provisioning under IFRS (O'Hanlon, 2013), as disclosures indeed contribute to rapid identification of financial problems (Hinks, 2008) and may provide early warning signals of an impending crisis (Allen and Carletti, 2010).

However, markets operating in an unstable investing environment lack reliable measures (Brown, 2008), which may lead to alterations of income (Ball, 2006). Some studies even suggest that firms would have performed better under old national GAAP. For this reason, the IASB eased fair value accounting standards relating to financial instruments (IAS39 and IFRS7), offering companies a choice of retroactively reclassifying financial assets previously measured at fair value into amortised cost, expanding this reclassification concession to assets that were voluntarily classified. Studies reflect positively on IFRS authorities (Neal et al., 2015), as earnings management decreased for many European firms during the crisis (Kousenidis et al., 2013; Filip and Raffournier, 2014). However, most studies consider the periods 2006–2007 and 2008–2009 to examine the effects of the crisis. It would be interesting also to examine the years 2007-2008, because in many cases firms were engaging in earnings management prior to the crisis.

In contrast, the Financial Accounting Standards Board (FASB) decided not to deviate from its policy. The results vindicate the FASB, as companies that used the reclassification option produced only short-term benefits, leading to greater information asymmetry and reduced transparency, and potentially allowing companies to manipulate some of their figures through creative accounting practices (Ramanna and Watts, 2007). It seems, therefore, that standard setters did not initially succeed in managing these difficult circumstances effectively. Responding to these accusations, in January 2013, the IASB issued IFRS 13, which provides a framework for measuring and disclosing fair value. This is less complex and improves

transparency and objectivity. Apart from these obvious advantages that might help to overcome the effects of the crisis, IFRS 13 was the result of joint efforts with the FASB, the US GAAP standard setter. It successfully created a common set of high-quality global accounting standards and, unlike the first attempt, these further improvements may result in greater convergence with US GAAP. Overall, this fair value debate seems to have been a starting point for fundamental and necessary improvements to establish a stable mechanism that will prevail in similar, future cases.

Amid these concerns, questions were also raised about whether authorities were prepared for such large and broad changes (Heilpern et al., 2009). The results prove that none of the parties involved was adequately prepared. Even credit-rating companies were unable to estimate the risk of default precisely, leading to many false ratings (Coval et al., 2008). As these complex operations seemed to threaten regulators and authorities, it was essential to update the accounting frameworks, focusing on these symptoms (Hatherly and Kretzschmar, 2011). Under both IFRS and US GAAP, the banking industry took advantage of securitisation transactions and derecognition of financial asset regulations. Securitisation transactions count as sales, offering banks an opportunity to increase their capital ratios and reduce their needs under the Basel Regulation.[13]

During the financial crisis, this accounting window increased (Laux and Leuz, 2010), while the lack of information available to investors and authorities led to irreversible outcomes (Barth and Landsman, 2010). Similarly, derecognition of financial assets enabled assets to be eliminated from balance sheets, allowing banks to increase their earnings and capital ratios (Ryan, 2008). This enhanced the belief that the banking sector's financials were imprecise (Bushman, 2014), so increased regulations were needed (Chiaramonte and Casu, 2017). Following this, the IASB focused on these two issues and in 2011 initiated several new standards (IFRS 10, IFRS 11 and IFRS 12) improving on IFRS 7, aiming to enhance the banking sector's

[13] The Basel Regulation or Basel Accord (Basel I) introduced in 1988 was developed by the Basel Committee on Banking Supervision (BCBS) as a set of minimum prudential regulations for banks (http://www.bis.org/bcbs/basel3.htm). Since then, it has been amended and updated to strengthen regulation of the banking sector. This resulted in the last Basel III Accord, which was adopted by the European Union in 2013 as a legislative package. This package applied as of 1 January 2014 to EU member countries. It includes a regulatory framework for the banking industry, such as capital requirements and supervisory tools, including stress tests and asset quality reviews (http://www.eba.europa.eu/regulation-and-policy/implementing-basel-iii-europe).

financial statement disclosures and improve accounting mechanisms. This enforcement also affected the shadow banking sub-sector.

In Europe, in contrast, most financing is still undertaken by traditional credit institutions. For this reason, and since shadow banking poses greater systemic risk than traditional banking, official concerns have increased, focusing on several issues, including the scale of shadow banking, regulatory gaps, regulatory arbitrage and the complexity of the shadow banking system. This may also have resulted from reducing the size of shadow banking, increasing its concentration (Beck et al., 2006), or lessening interconnections between commercial and shadow banking entities (De Jonghe, 2010). On the other hand, some consider that regulating shadow banking may make matters worse if it prevents banks from taking any risks at all (Ordonez, 2013). Restrictions on capital requirements will result in limited interest from investors, leading to decreased funding opportunities (Harris et al., 2014) and greater risk (Plantin, 2015). Overall, capital structure costs, financial regulation and audit innovation must be considered together in order to prevent similar future risks (Adrian and Shin, 2009; Schoenmaker, 2016).

For these reasons, authorities in both Europe and America have sought to enforce a legal framework on the shadow banking sector. IFRS must be sufficiently strict; otherwise, it is pointless discussing any shadow banking regulation. Therefore, apart from the improvements to IFRS mentioned in the previous sub-section, and owing to continued criticism of IAS 39, the IASB introduced IFRS 9. IFRS 9 introduced changes to the classification, measurement and impairment assessment requirements for the financial industry, including new requirements on hedge accounting. This implemented simpler and more accurate recognition and measurement rules, aimed at reducing volatility and controlling inadvertent risk. Since it was published only recently, few studies have focused on its effectiveness. Onali and Ginesti (2014) indicate a positive market reaction to its announcement. However, it is too early to conclude whether it has succeeded in regulating both traditional and shadow banking systems.

2.4 Critical summary of literature review and discussion

Through this project, I aimed to examine how the implementation and evolution of IFRS have contributed to eliminating earnings management. From my engagement with the literature, I determined that most studies have examined the idea of earnings

management in connection with IFRS, and have concentrated mainly on Australia, Germany, the UK and the US. For this reason, I focused on research that identified earnings management under IFRS, and closely related notions such as value relevance and fair value. Although these were the significant outcomes of my literature review, during the early stages I was unable to evaluate many of the studies because a critical issue emerged: I realised that many researchers had tended to confuse IAS with IFRS in their analysis, leading to misinterpreted results and confusion because IFRS and IAS differ considerably. If a country has managed to decrease accounting smoothing activities under IAS, this does not indicate that it will perform similarly under IFRS. Therefore, the key problem is that such studies cannot clearly determine whether the introduction of IFRS or IAS helped companies to eliminate earnings management.

I needed a clear view on the IFRS regime and its performance. To deal with this challenge, I decided to compile my review in chronological order, separated into discrete periods to meet the needs of my research. This approach had many advantages. First, it helped me to condense the large number of studies that did not separate IAS from IFRS, and assess their findings based on their years of analysis. I was thus able to establish which cases were more important in the literature within specific time frames. I was also able to determine the main issues that emerged following the introduction of IFRS, and whether earnings management was clearly presented and explained in these cases. Consequently, I was able to focus on the omissions and limitations of each period in order to detect the evolution of the models and methods used to examine earnings management, helping me to formulate my research questions and examine my hypotheses.

Much of the literature in the first period confirms a need to improve accounting standards. This is attributable to the fact that more companies are trying to compete globally, so they need regimes that will be accepted by the global accounting community. Throughout lengthy efforts to harmonise accounting, studies have answered many research questions, but theories and concerns seemed to increase when the EU began to attempt to achieve harmonisation through directives. Subsequent research has highlighted the importance and limitations of common standards, and many researchers have modified or extended the literature and improved their theories, leading to consideration of additional methods and raising more points of concern. The most important concern has been the introduction of IFRS, which has had a significant impact on companies' financials. Since it is a set of

unique, high-quality standards that aim to increase the transparency and comparability of information between adopting countries, most studies have understandably found a decrease in earnings smoothing activities and more truthful accounting figures. Indeed, many researchers argue that IFRS introduction has reduced the need for earnings management (Chua et al., 2012; Barth et al., 2012), yet these findings have been challenged by other studies. For example, Jeanjean and Stolowy (2008) find that earnings smoothing activities have not declined under IFRS, and Ahmed at al. (2013) indicate that IFRS adopters engage more in earnings management.

However, many of these studies are ineffective because they compare different sample countries and periods, leading to heterogeneity in their results. More careful sample selection might have enabled this issue to be anticipated, since different countries usually react differently, as I had already experienced as a professional in the stock market. Consequently, studies focusing on Europe do not necessarily apply to other IFRS countries. Similarly, research focusing on one transaction period will not necessarily be relevant to other periods. The literature on this key concept reveals mixed results, with no clear agreement on whether IFRS has managed to decrease or increase earnings management. For this reason, many researchers have focused on additional factors that influence the level of earnings management, such as fair value (Abad et al., 2000), taxation (Nobes and Schwencke, 2006), capital market motivations (Bartov et al., 2002) and managers' compensation (Ball, 2006). It may also be possible for several companies to engage together in earnings management owing to accounting and legal regulations (Gore et al., 2001; LaPorta et al., 2006; Ahmed at al., 2013). In these studies, many researchers have tended to consider the performance of US GAAP as a reference point to examine reactions to IFRS, adjusting statistical models and methods for US GAAP to IFRS needs. Therefore, I expected that similar studies would have observed more cases of income smoothing since the official introduction of IFRS in the US in 2007.

However, most research has focused on other interests. Most studies seem to be sceptical of reconciling IFRS and US GAAP owing to their differences, such as revenue recognition and write-offs of longstanding asset impairment losses (Trottier, 2013; Gordon and Hsu, 2014; Hong et al., 2018). They suggest that IFRS neither increase firms' liquidity and stock market performance, nor reduce the cost of capital. These results are clearer than the previously mentioned findings; nevertheless, studies of this period do not produce effective arguments concerning the introduction of IFRS

in the US. Most research examines US GAAP and IFRS separately, so does not determine whether US enforcement may increase the effectiveness of IFRS, and provides no evidence on whether IFRS successfully compete with US GAAP in terms of accounting misinterpretation, since the analysis does not take account of earnings management. Thus, the compelling finding for this period is that there are many differences between US GAAP and IFRS that may affect their performance, but their performance cannot be adequately compared in the absence of indications of whether companies that have adopted IFRS and are listed in the US have used earnings management to increase their financials or market value. This may cause ambiguities, because in many cases in my professional experience, companies have appeared to be performing well, but have later been proved to have deliberately used accounting misstatements.

Finally, I have critically evaluated studies focusing on the last financial crisis. Until recently, most studies have tended to focus on listed firms other than banks, owing to differing reporting regulations, and only a few recent papers have sought to explore this issue further. These studies mainly indicate that the financial sector, i.e. banking and insurance companies, may use earnings management techniques to hide their economic problems (Bushman, 2014), so increased regulation is needed (Chiaramonte and Casu, 2017). After the crisis, both IFRS and US GAAP authorities introduced several improvements to their enforcement relating to financial institutions, so it might be expected that these amendments would have helped with market regulation. However, it is unclear how financial companies have responded to these measures, since studies have not focused on specific improvements, such as IFRS9, but have examined authorities' strategies as a whole. Thus, the results for these institutions seem to be less pronounced, because although these measures sound beneficial in theory, little is known about their potential effects in practice. It seems, therefore, that recent literature has failed to consider whether specific amendments to accounting regimes have been effective in responding to the effects of the crisis, or whether accountants and investors should pay greater attention to the new regulations. The literature does not fully explain whether the reclassification option has been appropriate, how weaker economies have responded to the crisis, and whether stock markets have recovered from their losses. Similarly, there has been little in-depth empirical exploration of shadow banking in recent years.

Overall, a large body of literature suggests that firms that follow IFRS may derive significant benefits. However, it does not provide convincing arguments on whether IFRS has succeeded in improving accounting quality, because there is no clear evidence of whether all companies under IFRS have decreased their earnings management, including companies listed in the US and during the crisis period. Although the above-mentioned body of literature clearly points to the applicability and effectiveness of IFRS, it has only looked at specific cases and analysed particular samples. On the other hand, more recent studies focusing on qualitative analysis of IFRS use different research methods for analysis, such as interviews and questionnaires. However, this may create more deficiency in IFRS analysis, since modern researchers seem to forget how important and unethical earnings management phenomena may be. Some researchers seem convinced that IFRS have specific potential and it is necessary to wait for the market to regulate itself, ignoring any accounting smoothing activities. In this case, it is debatable what criteria accountants and investors should use to assess the performance of IFRS – managers' opinions, companies' financials, or the perceptions of authorities or companies' auditors?

Thus, there is a need to better understand how and why companies engage in earnings management, and how they benefit from it. There is also a need to return to quantitative analysis so as to develop new tools and elucidate the motives for earnings management, in order to help market participants to identify such cases before it is too late. A quantitative study analysing the characteristics and motives of firms that engage in such activities might make an important contribution to improving IFRS. Earnings management remains a contemporary issue of concern to investors and IFRS authorities, as it continues to represent a significant challenge for every accounting regime. My review of the literature reveals that many studies address earnings management problems and produce theories and findings on their performance; however, they fail to identify modern tools and techniques for earnings management, such as insider trading and abnormal market returns. These are important aspects that appear not to have been fully researched. As an investor, I am aware that many firms manage their earnings despite being listed on strongly regulated stock markets. Importantly, such firms have increased their stock market trading volumes, but it is difficult for market authorities to evaluate the motives for any insider trading. Nevertheless, no studies have been found that correlate insider trading with earnings management activities. The closest is that of Hail et al. (2014), who suggest that IFRS

enforcement against insider trading may increase financial transparency. Insider trading is an important gap in both the academic and professional literature because, as most studies use market values for their models, if market prices are affected by insider speculation, the precision of these models may be questionable.

Closely related is the cost of capital. The literature argues that the cost of capital has decreased since IFRS adoption; yet if this cost reduction results from earnings management, it may significantly change assessments of the effectiveness of IFRS. In their recent study, Eliwa et al. (2016) find no correlation between earnings management and the cost of capital, but their sample was drawn only from the UK. More research is needed to understand which individual standards most affect and are affected by earnings management, and how. The literature provides many examples of accounting misinterpretations, such as the Enron and Globo cases and the banking sector during the crisis. However, the challenge is to distinguish and define the individual standards responsible for this performance. The existing literature does not consider all aspects of how this phenomenon may arise in order to propose possible methods for its elimination. Therefore, reflecting on the literature and on my experience as a market participant, my aim is to address these gaps in accounting research following IFRS adoption, and to answer my research questions in light of this review (Appendix I, Table 7).

CHAPTER 3: METHODOLOGICAL PROCESS

3.0 Introduction

This chapter describes the methodological process employed to achieve the aim and objectives of this project (Johnson and Clark, 2006). It considers ontology, epistemology, methodology and methods (Crotty, 1998), which are interrelated and, along with additional assumptions, enable consistency in the research process, with many possible combinations (Appendix I, Table 8/Panel A). This section explains the underlying epistemological and ontological assumptions, describes and reviews the background of paradigms in accounting, and locates myself as a practitioner-researcher within this framework. Justifications are provided for my decisions to adopt a pragmatic approach, and to combine survey with action research in my methodology (Appendix I, Table 8/Panel B). At the end of this chapter, I analyse the limitations of my choice, and describe my role as a researcher.

3.1 Ontological Assumptions and Epistemological Considerations

Ontology and epistemology connect research and the researcher (TerreBlanche and Durrheim, 1999). They describe authors' world views and help them formulate their strategic approach (Wainright, 1997). Identifying these key considerations provides a more holistic view of the project. In this respect, this study follows Cohen et al.'s (2000) definition of ontology as claims about and perspectives on the nature of reality. This is the study of being, aiming to answer the question of what reality is, to understand how it is constructed and to discern what constitutes it (Blaikie, 2000). I also consider the principal dimension of ontology to lie within the opposing extremes of the objectivist–subjectivist continuum (Saunders et al., 2016). Thus, ontology distinguishes between the single truth of pure realism, as embraced by objectivism, and the individual reality of relativists/idealists/nominalists/conventionalists at the subjectivist extreme (Burrell and Morgan, 1979).

Preserving the same objectivist and subjectivist perspectives, epistemology concerns assumptions about the theory of knowledge, its nature and limits (Blackburn, 1996). It focuses on the origins of what constitutes acceptable, legitimate and warranted knowledge in a field of study (Johnson and Duberley, 2003) and frames the relationship between the inquirer and the object of inquiry (Maykut and Morehouse, 1994). Its perceptions establish the researcher's contribution to social knowledge and claim to show how this information is communicated to others

(Burrell and Morgan, 1979). Consequently, epistemology ranges from objective facts to subjective interpretations (Saunders et al., 2016), according to the context of the project.

It seems, therefore, that ontological and epistemological considerations are inseparably connected with the researcher's convictions and perceptions of what constitutes reality. From my perspective, before setting out on this doctoral programme, I had never considered these assumptions, believing that my personal perceptions were irrelevant to my working and educational life. As I had to deal with numerical reports, my fundamental belief was that truth is only revealed by numerical data. Therefore, individual perceptions might be a limiting parameter in confirming or explaining the reality observed by numerical data. Similarly, during my studies, I had to deal with quantitative approaches.

Despite my experience, I had never considered involving my personal world view and developing a critical conjecture on my practice. However, during this programme, I have come to understand that my world view had been rather unexplored in terms of interrelationships. Reflecting on this consideration, I started to realise that my personal philosophy is closely related to my practical thinking. Consequently, I have recognised that what I accept as true affects what I do, and this cannot be predetermined. On the contrary, I have come to believe that questioning my theory and practice enables me to gain a better understanding of my position, and I am able to develop my standpoint based on my experiences, beliefs and values. To further position myself and define my assumptions, in the next section, I review the general framework of paradigms and consider their parameters.

3.2 Philosophical Paradigms of Accounting

Research philosophy refers to the nature and background of knowledge underlying the research (Saunders et al., 2007), and is defined by research paradigms. Paradigms refer to the broad framework of beliefs, perceptions and assumptions about the development of knowledge (Cohen et al., 2000) and, as already mentioned, can be characterised with reference to their ontology, epistemology and methodology (Guba, 1990).[14] Therefore, they include research procedures and agreements that are accepted

[14] Axiology is usually added to these assumptions (Saunders et al., 2016). This refers to a researcher's values and their nature within the process. It is an implicit part of the research, revealing personal perspectives and ethics, and can easily be detected by the reader as part of the whole project. Therefore, it is important to focus on other components that fuel the debate about philosophies.

by scientists in their efforts to establish patterns in their processes and address their research problems (Gliner and Morgan, 2000). This has resulted in the divergence and coexistence of multiple research philosophies, paradigms, approaches and methodologies engaged with ontological and epistemological issues. However, each academic discipline has specific research perceptions, and its status may be affected by specific scientific subjects.

Accounting and finance follow the broader context of the social sciences (Starbuck, 2003), formulating interesting sub-sets of related philosophies. Lincoln and Guba (2003) suggest four major paradigms (positivism, post-positivism, critical theory and constructivism), while in their latest work, Saunders et al. (2016) consider five research philosophies: positivism, critical realism, interpretivism, post-modernism and pragmatism. Several researchers also consider an additional set of assumptions, formulating a set of participatory paradigms which assume that practical experiences create reality. The most well-known studies are by Burrell and Morgan (1979) and Arbnor and Bjerke (2009; see Appendix I, Table 9). Thus, there is a wide range of possible combinations of different assumptions, between positivism at the objective extreme and interpretivism at the subjective extreme.

Positivism is highly influenced by empiricism (Pearson, 1892), stating that reality exists independently of human thoughts and perceptions and that our senses are sufficient to reveal reality (Sarantakos, 2005). Thus, positivism may be referred to as naïve realism (Guba and Lincoln, 1998) which focuses on pure, plausible, observable and measurable facts and data that result in credible and meaningful information (Crotty, 1998). Based on these regularities, a positivist researcher aims to define any causal relationships in the data in order to describe and explain phenomena and to create law-like generalisations (Gill and Johnson, 2010). During all these processes, it is essential for the researcher to remain neutral and detached in order to avoid influencing the project's findings (Crotty, 1998). All these cases seem to fit closely with the world of finance in discovering, explaining and predicting phenomena. Indeed, most studies reviewed in the literature perform hypothesis-testing procedures to create predictive knowledge, verify causal relationships between measured variables and produce generalised findings (Gordon and Porter, 2009), supporting their process with statistically reliable tests (Bonner et al., 2006). For these reasons, positivist paradigms initally prevailed in accounting.

However, this quantitative statistical approach was insufficient for researchers. They needed to apply different assumptions and techniques to observe the social reality behind the numbers (Ahrens and Chapman, 2007). Therefore, interpretivism was introduced, a more naturalistic approach supported by subjectivist perspectives, including purely qualitative methods. Interpretivism is directly in opposition to the objectivity of positivism, and focuses on understanding interpretative descriptions of events (Holmes et al., 1991) rather than developing generalisations (Fay and Moon, 1977). Interpretivists emphasise the subjective world of human experience (Cohen et al., 2000) and accept that individuals construct reality based on interactions with their social environment. Therefore, reality is multiple, relative and may embrace many interpretations (Newman and Benz, 1998) and, since it is created through human perceptions, it may span multiple dimensions that are equally correct (Merthens, 2010).

For this reason, interpretivism advocates that it is necessary for the researcher to understand differences between humans in their roles as social actors. Participants are considered to be active knowers who understand and reflect on social phenomena, while researchers are incapable of being entirely detached (Dunne et al., 2005). This approach focuses on reflecting how social activities of accountants and different groups of people, such as directors, managers, and even customers, through their behaviour may develop and affect accounting norms and techniques in practice (Ahrens and Chapman, 2007). Consequently, interpretivism has gained momentum in the social sciences, establishing itself as a considerable rival to positivism. Accounting theory has followed this general drift, and researchers are increasingly using these underpinnings (Quattrone, 2000), as they seem to be a successful tool for this science, producing challenging outcomes that other philosophies are incapable of addressing (Parker and Roffey, 1997). Interpretivism includes further approaches, such as social constructivism, phenomenology and hermeneutics (Collins, 2010).

Additional assumptions also relate to the logical reasoning of the theory development process. For example, typical positivist research first formulates hypotheses based on existing theory, and then tests them. However, this process is not applicable to all research. The difference lies in the priority of the approach to knowledge. In other words, the research must define what to process first, theory or data. There are two main approaches: deductive or theory-testing, and inductive or theory-building (Saunders et al., 2016). More specifically, the deductive approach

signifies that the research moves from the general to the specific. It develops a theory and examines hypotheses to derive outcomes logically (Ketokivi and Mantere, 2010). In contrast, inductive reasoning follows the opposite path. There is no need for premises, but data/observations are processed first, potentially resulting in theory developments (Ketokivi and Mantere, 2010). It seems, therefore, that these approaches establish another set of extremes within the research process, similar to the objective–subjective and quantitative–qualitative binaries. Hence, this reasoning can be attached to the previous paradigms. Without resorting to reductive labelling or pair matches, deduction seems to correspond better with positivism, and induction with interpretivism (Delamont, 1992).

3.3 My Position as a Practitioner-Researcher

Considering all these different approaches, I needed to locate myself within this theoretical framework of inquiries. In order to develop my paradigm, I had to distil my research motivation to determine how this might frame my ontological and epistemological considerations. In my profession, I am familiar with fundamental analysis, so in this research I set out to answer questions such as how the introduction of IFRS would affect information for fundamental analysis, how I could reflect this in my practice, what I could learn from my results and how I could apply these to improve my working perspectives. How could I transform my empirical findings into acceptable theories, creating new knowledge for theorists and practitioners, and how could I interest my peers in engaging in fundamental analysis? What should I propose as a mechanism to prevent misstatements in the future?

I recognised that it was crucial to create measurable and accurate outcomes, accepted by external experts in the accounting field. Therefore, I decided to apply hypothesis-testing procedures with quantitative statistics. I considered that this type of data would be sufficient to examine my cases, leaving aside any interactions with individual market participants that might colour my conclusions. Thus, I estimated that the approach that would best suit my scope must take an objectivist stance with deductive reasoning. By default, I excluded philosophies from the subjective extreme, such as interpretivism and postmodernism. Postmodernism represents a range of sceptical and distrustful viewpoints on accepted ideologies and tenets. Its adopters presume that knowledge is not absolute but is a product of social, historical and

political interpretations, and they aim to deconstruct established realities (Kilduff and Mehra, 1997) and legitimise alternative marginalised views (Chia, 2003).

Initially, I moved toward the philosophy of positivism, focusing on a naturalistic position concerning accounting regimes, entailing a realistic ontology that would prove that the reality of aspects of IFRS is singular and unique, external and independent of social actors. Indeed, prior to my engagement with the literature and the processes of the programme, I accepted that there could be only one truth: the reality of numbers. In both my professional career and education, I had always taken into consideration numerical outcomes that could be easily measured and analysed. I have never thought that personal feelings, values and attitudes might also constitute acceptable sources of knowledge.

However, in reviewing the literature and focusing on the scope of this study, I realised that even the truth of numbers may hide personal evaluations. They cannot reveal a single truth, and thus cannot accurately be generalised. I started to reflect on my intentions for this research, and realised that examining the performance of IFRS in five countries would not necessarily mean that their performance would be similar to that of other countries. Similarly, examining specific years would not mean that the results would be consistent with the following periods. I also identified additional cases that raised questions about the objectivity of the data. For example, earnings management has many motives, and firms' manipulated financials reveal the multiple subjective realities of managers rather than an accurate position of the firm. So how can one be sure that companies' assets have not been affected by managers' perceptions and beliefs? Inspired by this realisation, I recalled many cases during my professional career as a market analyst that had caused me to question the proof of data and prioritise my personal beliefs in investing in listed companies. Many companies' reports reveal manipulated data, so how could I be sure that stock market prices reveal the truth? Thus, it seems that a firm's market value is often a result of emotions, estimations, prospects and investor information. At this point, I disagreed with Hines (1988) and Morgan (1988), who state that accountants should not consider themselves as representatives of reality but rather as 'subjective constructors of reality' (Morgan, 1988, p.477).

All these thoughts led me to conclude that there might be other layers of reality behind the numbers. Without ignoring that in many cases there might be one truth, it seems that in accounting science, ontology and epistemology interact very closely,

leading to a cyclone of combinations that makes it easy to transform objective data into subjective information. Therefore, throughout this process, I considered different positions on reality to challenge my ontological position and clarify my epistemological assumptions. In some cases, I accepted the single reality of positivism, but was also careful to recognise that personal estimations and values develop acceptable knowledge. Indeed, most IFRS amendments and developments have been based on personal beliefs and considerations. Thus, I deteremined that reality is a relative concept that may interact and evolve in different situations. Each branch of accounting, as part of social sciences, may have its own reality, depending on the communities in which it operates, from the single truth considered by accountants to the subjective motives of analysts and the political reasoning of responsible authorities.

Considering all these, I established that positivism would be an inappropriate philosophical approach for this study. Reflecting more on the paradigm, I decided that it would not provide me with an opportunity to consider my role as a practitioner-researcher, from which I aimed to generate knowledge that could be immediately applied to the accounting community or be an agent of change to existing practices. Thus, I could not be independent and external. I therefore decided to follow the paradigm of pragmatism rather than critical realism. Critical realists claim that reality is layered above any empirical results, as it is extremely complex. Consequently, they imply that there is always a hidden truth or reality, and accept that all observations are fallible. For this reason, they emphasise the importance of applying multiple measures and methods to minimise such biases and remain as objective as possible (Reed, 2005). I chose to follow the tenet of pragmatism, not because I wanted to avoid choosing a philosophy, as Saunders et al. (2016, p.143) suggest, but because I saw myself through this doctoral process as a practitioner-researcher seeking scientific assertions, considering the complexity of the situation examined. Pragmatists are not concerned with theoretical questions of reality, but accept a claim as true if its practical application proves it to be so (Scruton, 2001). In this context, I focused on the approach that best matched my intentions, so following this route gave me more options to concentrate on the problem and apply action research with a survey, as described in the following sections.

3.4 Formulating the Research Methodology

The methodology is another determinant of a paradigm, and refers to the plan of action for discovering knowledge (Wainright, 1997). It is the main way to connect all major parts of a research project (Myers, 2009), and consists of the methodological design and strategy. To eliminate any confusion, this section describes the main components of my methodology, and justifies my strategy selection. It starts with the approach adopted for this work-based research project, enhanced by theory, and then provides detailed explanations of the research context and the actions taken in the research cycle. Finally, it describes the limitations of the adopted strategy and my role as an action researcher.

3.4.1 Methodological approach

Methodological design

According to the objective–subjective extremes reviewed in the previous sections, the research methodology may be classified as qualitative or quantitative. A qualitative approach is more naturalistic, lying at the subjectivist pole, as it focuses on the socially constructed nature of reality (Saunders et al., 2016). Thus, it attempts to study different groups of observations to describe, compare and explore the attitudes, behaviour and experiences of individuals (Stainback and Stainback, 1988). In contrast, quantitative research is typified by an objective stance. It focuses on the measurement and analysis of variables, aiming to determine their causal relationships (Creswell, 1994). It thus seeks to establish general principles derived from interpretations of variables, excluding any interference by individuals.

There are further differences between these approaches concerning the forms of data they present (Creswell, 2003). Qualitative research generates data that are not in numerical form and cannot be quantified, such as narrations and words (Punch, 1998). They follow no formalised structure, but are more open and responsive to their participants, attempting to interpret the results in their natural setting (Denzin and Lincoln, 2000). On the other hand, a quantitative design tends to generate data that can be collected and expressed in numerical form, ready to be analysed and presented statistically (Backman, 1998). Although there is no right or wrong choice, the methodology should be based on the context, purpose and nature of the study. I chose to follow a quantitative research design, together with its associated assumptions. Based on a high level of reliable numerical data and statistical processing, I intended

to focus on verifiable facts, leading to conclusions that would be generally replicable in a data-driven process (Hambrick, 2007). Therefore, a quantitative design presented my process with many advantages (Matveev, 2002). Indeed, it allowed me to focus on and isolate important elements that might affect my observations, enabling me to eliminate any confusion and ambiguity from my models. Furthermore, it would be possible to reconsider some research aspects and reassess some parameters in future time frames. A quantitative design is an instrument to enable valid measures (Patten, 2004), assuring the researcher of accurate outcomes (Wallen and Fraenkel, 2001), while at the same time its structure permits the reader to follow and understand the procedures.

Methodological strategy

The research design can be further divided into strategies. These strategies use a common set of procedures to describe and depict the research methodology and better define the link between the philosophy and the subsequent choice of methods (Denzin and Lincoln, 2011). There are many categories, but the best known are experiment, survey, archival research, case study, ethnography, action research, grounded theory and narrative inquiry (Saunders et al., 2016). These strategies may involve a quantitative or qualitative design, or may implement both types. For the scope of my research, I decided to combine empirical survey with action research. Empirical research uses direct or indirect evidence to answer a specific question and to reject or support a hypothesis (Goodwin, 2005). In data analysis, such research uses standardised statistical methods which are critical in determining their validity.

According to Heitink (1999), the empirical research approach consists of the following steps. The first is observation, where the researcher observes, collects and organises inquiries concerning a phenomenon. This is followed by induction, where the researcher must formulate hypotheses and general expectations of the examined phenomenon. In the next step, deduction, the researcher estimates the consequences of the hypotheses as testable predictions and formulates methods that will test them. The researcher then proceeds with hypothesis testing and data collection. This is followed by evaluation, meaning interpretation of the results and formulation of a theory. This cycle ends with an argument that presents the results as a reasonable explanation for the phenomenon. Surveys define the status of an identified variable and rely on systematic collection of information that can be systematised in useful models,

establishing associations between variables (Patel and Davidson, 1994). Empirical surveys determine associations between variables, using statistical techniques to describe and measure their relationships (Creswell, 2012). Surveys are often confused with questionnaires and interviews, but the latter are simply data collection techniques for this strategy. Surveys may include alternative techniques, such as secondary data, and may be addressed not only to groups of people, but also to objects.

In addition, action research is a methodological choice in which the researcher participates actively in systematically collecting research data to deeply examine an objective and evaluate the results (Remenyi et al., 1998). It was initiated by Lewin in the 1940s (Cousin, 2009; McNiff and Whitehead, 2002; McKernan, 1996) in order to add new research ideas and challenge traditional practices. Lewin (1948) believed that one understands something better if one tries to change it. Therefore, the initial plan of action research was to study phenomena by changing them and evaluating the effects of this change. In adhering to these values, action researchers try to solve real problems with real solutions. Thus, they use their professional experience, aiming not only to change but also to improve an environment (Elliott, 1991). Their aim is not only to improve their learning and professional development, but also to improve the social context in which they operate (Gill and Johnson, 2003). Therefore, action research is twofold: it emphasises the researcher, offering the possibility to improve and reflect on his understanding practically (Carr and Kemmis, 1986), but also advocates the researcher as a contributor, offering the opportunity to validate and reflect on his practice and knowledge (McNiff et al., 1996). As this approach has practical implications, it is important for the researcher to anticipate the possible impacts of his intervention in the examined situation. Therefore, it is a very popular approach for educational studies, but is also widely used in practical cases in the social world, such as managing organisational change (Remenyi et al., 1998).

3.4.2 Rationale and justification for my approach

Rationale

As described in the previous sections, empirical studies formulate specific hypotheses, with pre-planned and structured designs, and result in perfect descriptions of a market (Lehman, 1989). As I needed to produce systematic sets of data based on reliable statistics from firms' balance sheets, this was an appropriate strategy to recognise potential trends in IFRS adoption. However, this approach would not

provide me with an opportunity to use my professional experience to consider my problem, as hypotheses must reflect the literature. Instead, action research focuses on practitioners' problems and involves the researcher's intervention in a change or improvement to specific practices (Blaxter et al., 2001), and its purpose is to make decisions oriented to specific problems. Therefore, its research questions derive from practical concerns and have limited generalisability, and statistical significance is of low importance (McMillan and Wergin, 1998). Most studies in my field apply empirical surveys, while most doctoral studies in this area use action research.

I decided to conduct an empirical survey project within the context of action research, as this gave me more possibilities to assess the effectiveness of IFRS and evaluate market reactions in a number of cases. Indeed, the survey helped me to define the problem and gather data from a wide range of sources. This enabled me to maintain the statistical significance and generalisability of the survey to examine IFRS. Based on a high level of reliable numerical data, I was able to include both cross-sectional and longitudinal tests and to elaborate these data with the necessary statistical tools, such as linear modelling and logistic regression. This approach provides valid and accurate outcomes (Patten, 2004; Wallen and Fraenkel, 2001), fulfilling all the criteria of accurate research, including causality, internal validity and reliability (Johnson and Duberley, 2003). This helped me to formulate my hypotheses and test them empirically (Burns, 2000).

However, these advantages were insufficient for a DProf programme, as I needed to add more practical concerns to the previously specified benefits. I aimed to reflect my working expertise in this project. Since a strength of action research is that the researcher is also a participant (Blaxter et al., 2001), I decided to use this methodology to enable me to add practical suggestions to my findings. My intention was to move a step further from theoretical research and continue to critically review, evaluate and suggest possible improvements relating to IFRS implementation. Furthermore, action research is not only applied in cases focusing on specific organisations, but can be used to examine any events relating to the researcher (Gill and Johnson, 1997). Indeed, my rationale for this approach was to give prominence to my advantage as a practitioner-researcher. Since I work as an accountant, I was able to approach the complexity of IFRS implementation as a researcher involved in applying accounting regimes to Greek firms, which might be impossible for an external researcher (Saunders et al., 2007).

Therefore, this concept was particularly helpful in all the areas in which this research was interested. On the one hand, it allowed me to confront concerns arising from IFRS implementation and derived from theory and practice which I intended to examine. On the other hand, action research improved my personal development and understanding of IFRS, and enabled me to emphasise my self-evaluation (Gill and Johnson, 1997; Mills, 2003). This process thus provided a perfect opportunity to question my beliefs, clarify my values and evolve in this context (Zajc and Bednarz, 2007). This combination enabled me to combine theoretical concerns with practical reflections. I was able to transform the theoretical questions into practical concerns. For example, I was able to answer the question of whether IFRS performed better than old GAAP and whether IFRS had been trusted during the crisis, while providing insights for practitioners into whether they should invest in IFRS companies listed on the US market and what companies they should focus their attention on during crises.

Justification

From the literature review, I concluded that earnings management has continued to be a critical issue even after IFRS implementation. I aimed to address this problem because, as a market professional, I have detected that the tools used for creative accounting have been updated but the literature does not refer to such cases. Indeed, I have noticed many cases of suspicious performance by firms with high insider trading activity and firms that have made late announcements in order to retain privileged information. Therefore, as previously mentioned, I chose to combine empirical survey with action research because this helped me to thoroughly understand the questions that I needed to answer, both for my own benefit and that of the accounting research community. Through this process, I was able to determine the nature of the research problem and the current state of knowledge, and evaluate the opinions of market participants on earnings management. In addition, I considered that an action research approach would align better with my role as a practitioner-researcher, and would integrate with my intention to develop meaningful and understandable results that could be used by other market participants. I am thus confident that my choice of this combination of strategies was appropriate, as it helped me to contribute to improving accounting through my personal development as a market professional (McNiff et al, 2003), as well as facilitating use of the statistical variables involved in my analysis.

Detecting real problems through action research allowed me to maximise the experiences gained from accounting, auditing and investing during my career as an accountant and stock market participant, so as to determine why earnings management still exists under IFRS, and how harmful and unethical it may be for investors. I have already explained the importance of earnings smoothing, but this is the first time that accounting research has given priority to a real-world dilemma and issues arising from IFRS implementation. I aim to bring the problem of earnings management to the fore in terms of its effects on the accounting community, as most previous studies have focused only on its financial effects. Indeed, my review of related literature revealed that only general conclusions have been drawn on earnings management. Many researchers do not appear to consider earnings management to be harmful, as they believe in market balance. Moreover, most studies have carried out empirical surveys and built statistical models, or have sought to determine accountants' beliefs and opinions using interviews or questionnaires. Some have used action research, but only to address a problem relating to a specific company. Thus, I contribute to research design in my field by reinforcing the methodologies offered for accounting research with a set of strategies that combine companies' financials with real-world market issues. Of course, the methodology alone cannot solve the earnings management problem; however, I believe that my choice was ideal for this specific case and for the scientific accounting community. This methodological combination enabled me to develop knowledge that will be useful to responsible authorities and market participants. Therefore, I consider this to be a starting point for further research that combines statistical data with researchers' experiences and reflections within an action research framework.

3.5 Action Plan

3.5.1 Action research type

Having identified my general methodological framework, I was able to decide on the exact structure of my approach. Different kinds of action research models may produce different types of knowledge. Most researchers identify three common types: technical, practical and emancipatory (Carr and Kemmis, 1986). Technical action research is applied to solving practical problems. It tests an intervention using a pre-specified theoretical framework (Lewin, 1951) and results in the refinement of existing theories. Practical action research is interpretive research by practitioners for

practitioners, aiming to enable participants to understand current situations to contribute ideas (Graham, 2006). Finally, emancipatory action research is a participatory process that involves individuals or groups intending to develop practical knowledge in pursuit of critical examinations of the current practice of an organisation or issue to change and improve it (Wadsworth, 1998). This is the most common type of action research, and requires the researcher's intervention and collaboration with organisational members (Gill and Johnson, 2003), leading to proposed changes. All participants play a vital role in the research.

All these cases have some elements in common, and follow the general aims of action research of improvement and involvement (Carr and Kemmis, 1986). However, in reading about these different approaches to action research, I discovered that this methodology is confused, including multiple traditions that are constantly evolving (Herr and Anderson, 2005). Therefore, neither the above categories nor other studies such as those by McKernan (1996) and McNiff and Whitehead (2002) would allow me to express my research effectively.[15] I was therefore inclined to follow Coghlan and Brannick (2005 and 2010), who identify 12 types of action research strategies, including classic, participatory and reflective practice.

Within this framework, my initial thought was to follow the traditional action research approach; but at the same time, I felt that my research had to add more information. Indeed, I identified the potential for it to be empowering (Carr and Kemmis, 1986) and emancipatory (Carr and Kemmis, 1986). However, contrary to Cohen et al. (2011), who argue that action research cannot be empowering or emancipatory, I believe that action research always enables individuals and communities to flourish (Coghlan and Brannick, 2010). In order to influence social change, it is always better to work with others, and there are more opportunities to increase personal, professional and social benefits (Cohen et al., 2000). Indeed, for me, this is the primary difference between action research and participatory action research (PAR), as in the latter the investigator is always acting 'in relation with other people' (McNiff and Whitehead, 2002, p.36).

Therefore, I understood that I needed to follow a PAR approach, as this seemed to be particularly relevant to my intentions. It would enable me to focus beyond the

[15] McKernan (1996) introduced his new model of 'rational-interactive dynamic' action research, based on three general types: scientific, practical-deliberative and critical emancipatory. McNiff and Whitehead (2002) also specify three dominant models of action research: conceptual, abstract and reified.

organisational frame, involving a community and empowering researchers to use their working knowledge (Coghlan and Brannick, 2010). My research agenda was not typical, but it attempted to understand the performance of accounting regimes under certain circumstances and to engage in situations that might be responsible for any abnormal actions. I did not have access to internal information, but only open-access public information and tacit knowledge acquired through my working experience. Indeed, I went back over the literature review to detect whether these cases had already been analysed for my dataset, and I also used theoretical models derived from the literature. Furthermore, in this path I was alone, as I did not cooperate with colleagues and other insiders because I do not work for an organisation but am self-employed in the financial field. Therefore, I did not aim to focus on the change process of a specific organisation, but on improving the general field of accounting, as an insider in this community.

To provide a detailed depiction of the nature of collaboration and participation and to further enhance my argument and choice, I needed to place myself in the context of this PAR. Positionality in terms of insider or outsider is central to all action research approaches. Thus, I followed Herr and Anderson's (2005) insider–outsider continuum (Appendix I, Table 10). Within this spectrum, I was easily able to position myself as an insider researcher. Insider researchers engage in research within a community or organisation. As previously stated, I consider myself to be part of the accounting field and an insider in this community. My major goal was thus to address problems relating to this field and generate knowledge that could be fed back into the setting, resulting in improved practices.

However, I recognised that I was probably not the only one interested in this research and its outcomes. Accounting has important implications and extensions, not only for accountants but for society in general. Also, nowadays it is very easy for individuals to invest in listed companies, so they need to be familiar with the issues I aimed to examine, and with my views and beliefs about IFRS. In this respect, I again followed Coghlan and Brannick (2005), who suggest that it is important to distinguish between the researcher and the system in and on which the research is taking place. I needed to clarify my role. Through their deep analysis and examples, Coghlan and Brannick (2005) further define these concepts. The system refers to a large organisation, community, department or unit, while the role is determined by whether the researcher is committed to organisational or self-study. In this respect, they

indicate that there may be a range of such combinations, distinguishing a commitment to intended self-study in action by the researcher and/or the system. They formulate four possible cases, as described in Figure 1.

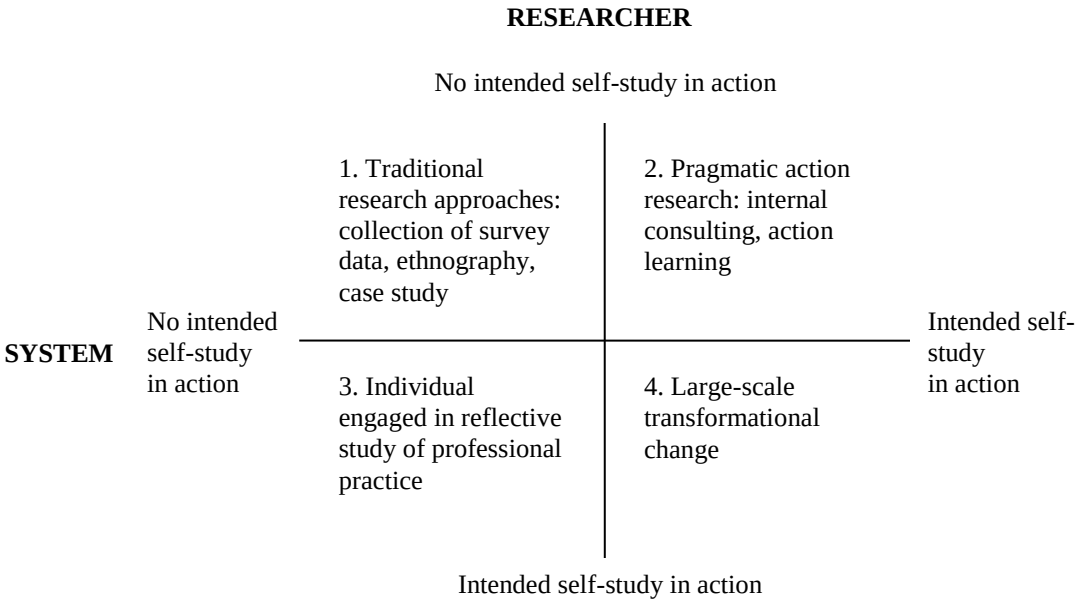


Figure 1: Interaction between researcher and system

Source: Coghlan and Brannick (2005)

In examining this table, I could situate myself in all quadrants. For example, I was using a survey methodology, and I aimed to examine pre-identified issues (Coghlan and Brannick, 2005), making me part of the first and second choices respectively. Therefore, I considered it appropriate to focus first on the edges, to better define my intention and eliminate my choices. For this case, however, I needed to identify myself as an insider researcher and at the same time a participant in a doctoral programme. Concerning the researcher continuum, as already described, my initial intention was to position myself at the intended self-study edge. In participating in this programme, I aimed to critically reflect on myself in action (Schon, 1983), to improve my professional practice and engage myself in examining assumptions that have unfolded during my career.

In addition, the system continuum was more complicated, and it was therefore hard for me to decide. I did not want to limit my view and the outcomes of the research to a restricted audience, but aimed to communicate my findings to a broader context. These opportunities for extension would help me to provide suggestions for potential improvements. Thus, I aimed to suggest changes or problem-solving

approaches (Coghlan and Brannick, 2005) toward the implementation of IFRS, resulting in the selection of the fourth quadrant. However, this assumes that the system is deliberately engaged in study in action to undertake transformational changes, which in my case does not happen. On the basis of all this information, I located my project in the third quadrant, which denotes a self-study in action for the researcher but not for the system (Coghlan and Brannick, 2005). This combination seemed to cover my intentions for this study, and promised to help me better employ the cycles of action research described in the next sub-sections.

3.5.2 Action research cycles and phases

As already described, action research seeks to detect, describe, explain, act on and improve the examined field. There are variations between action research models, as some researchers describe their process as cycles of reflective action, some as flow diagrams and some as spirals of action (McNiff et al., 1996), depending on which aspects they aim to emphasise. However, most are cyclical in nature (Gill and Johnson, 2002), involving a reflective approach, while each cycle centres around reviewing the desired change. The key stages remain planning, acting, observing and reflecting (Zuber-Skerritt, 1992), but over the years many researchers have introduced differentiations. For example, Cousin (2009) identifies a formal reconnaissance stage to describe the condition prior to the context and purpose of the research (Coghlan and Brannick, 2010). In this respect, I was likely to engage in the traditional action research spiral of iterative cycles of planning, acting, observing and reflecting (Lewin, 1948).

This spiral process was crucial for my work, but as I had to deal with real-world accounting issues, I needed to add more actions into the classical cycle steps to enable me to explain my empirical survey and hypotheses. I therefore combined Mills's (2003) model, Susman's (1983) Lewin-enhanced model, and McNiff et al.'s (1996) and McNiff's (1998) models, formulating an action research process that involved identifying the problem, an proposing action plan, selecting action steps, planning data collection and data gathering, while at the end of the cycle I could draw conclusions and communicate my findings. Therefore, I applied the steps of an empirical survey, as described in Section 3.4.1, within each cycle of my action research process, and linked these actions in a spiral of cycles. Thus, I produced immediate results as I worked toward completing the project. I enhanced the fluidity

between stages and increased the feedback within the model cycles (Elliott, 1991). Overall, my action plan consisted of three main cycles, as illustrated in Table 2.

Table 2: Cycles of my action plan

Cycle I: IFRS vs Old GAAP Data input: Working experience and expertise.	Problem: Suspicious accounting cases under IFRS in Australia, Germany, Greece and the UK.	Plan: Examine listed firms from these countries under IFRS and compare the results with old GAAP. Find models that would add new knowledge to earnings management techniques and would have practical interest.
↓	Formulate hypotheses Collect data and calculate ratios Run the models Evaluate the results and state whether the hypotheses hold Reflect	
Cycle II: IFRS in the US Data input: Working experience and literature	Problem: Effect and impact of the introduction of IFRS in the US.	Plan: Examine companies that follow IFRS and are listed in the US. Detect their financial effects.
↓	Formulate hypotheses Collect data and calculate ratios Run the models Evaluate the results and state whether the hypotheses hold Reflect	
Cycle III: IFRS and US GAAP under crisis Data input: Working experience and literature	Problem: Impact of the last crisis on IFRS and US GAAP	Plan: Examine the financial sector for earnings management under IFRS. Examine the reclassification option.
↓	Final reflection along with previous results Combine and summarise the conclusions of all cycles	
	Final suggestions	

Cycle I

This cycle could be divided into two sub-cycles. Initially, I was motivated by the literature and my working experience as an accountant in Greece, so I was concerned to examine IFRS implementation in Greece. As I had examined the post-adoption effects of IFRS in Greece for my master's dissertation, I had already detected several interesting gaps in the literature, which I aimed to fill. Therefore, I intended to examine any falsified statements (FFS) under IFRS, to compare them with the previous national GAAP, and to examine individual IFRS standards to determine which might be engaged in earnings management. I also formulated an additional hypothesis for insider-trading activities, because as a market professional I have seen many suspicious cases of stock performance linked with insider trading. I collected the data and analysed them through statistical models. However, I realised that my sample did not provide a comparative analysis of other countries. Regarding this

objective, I recognised a need to examine additional countries to better estimate IFRS performance. My choice was closely related to my work; thus, as explained in Chapter 1, I also included Australia, Germany and the UK in my sample.

Taking advantage of this opportunity, I added supplementary examination models. For this reason, I decided to conduct an extended literature review in order to find better proxies for FFS calculation that were adjusted to my parameters, and to consider longitudinal analysis of accruals, auditors' opinions and the cost of capital. Therefore, I was able to formulate my three final hypotheses for this cycle and run my models. Analysis and evaluation of my results revealed that the problem of this cycle had been fully answered. However, I did not find supporting evidence for IFRS implementation in the US. As many insist that IFRS effectiveness relates to external enforcement, such as national laws and regulations, I realised that it would be particularly interesting to determine whether IFRS performed better in the US than in other countries. For this reason, I proceeded with the next cycle of action research, and formulated additional hypotheses to examine IFRS performance in the US and document another crucial issue during IFRS implementation.

Cycle II

Through this cycle, I aimed to evaluate the effects of IFRS implementation in the US. This is undeniably important for IFRS, as they have been accepted into one of the biggest stock markets globally. The actions of this cycle were the same as before. I searched the literature for hypotheses and gained feedback from data on firms listed on the US stock market but following IFRS. The results of this cycle provided examples of how IFRS performs outside Europe. This added another parameter to my study, a comparison between IFRS and US GAAP, simultaneously contributing important information to the next phase. Indeed, in 2008, as the crisis broke out, I was already working as a stock trader, so my first thought was that, apart from the system that seemed to have collapsed, IFRS was responsible for many issues. This led me to consider what would have been the case if countries had still had their old GAAP or if they had followed US GAAP instead. This cycle therefore added information to enable consideration and comparison of IFRS and US GAAP under crisis, as described in the next cycle.

Cycle III

The objective of this final cycle was to compare and examine the performance of IFRS and US GAAP under crisis situations. Having distilled all the necessary information from the previous phases, I was prepared for this final step. The only challenge of this stage was to locate interesting and relevant literature, as it was a contemporary issue and few researchers had yet focused on it. However, I combined my expertise as a stock analyst and prepared my models, enabling me to examine the last three hypotheses, again based on secondary data from accounting figures. Overall, throughout these cycles, I managed to establish a total of nine hypotheses that addressed interesting and contemporary issues, as distilled from the adoption of IFRS over time. My findings would help me to answer many inquiries arising during my working life, and would therefore improve my professional perspective.

3.5.3 Limitations

In seeking to minimise any possible negative implications resulting from my process design, it seemed that by combining empirical survey with action research, I would be able to eliminate any disadvantages of both approaches. I established a distinct set of data, and in formulating hypotheses, I overcame the limited potential for generalisation associated with action research (Adelman, 1993). However, it was impossible to avoid the natural limitations of this research approach. Hence, although studies that follow this paradigm and methodology offer many advantages for financial disciplines, they tend to produce less detailed information (De Vaus, 1986). Therefore, my research was too focused on hypothesis testing and structured data processes that might ignore creative thinking. Relationships between variables were simply observed and identified, not manipulated. Moreover, I did not establish the causation of variables, but simply managed to reveal the truth of numbers. Finally, individual realities and motives concerning accounting regulations and firms' performance are not depicted in this research.

3.5.4 My role in the research

I had previously had little experience of action research. My previous research had been based on classical methodologies. In quantitative studies that analyse secondary data, researchers are objective observers who have little agency in the study. They aim to retain the objectivity of quantitative research, meaning that they seek not to

influence any aspects of it. Such researchers attempt to remain detached from the study, the sample and the data. They try not to manipulate it with their own personal values, perspectives and experiences, as such involvement might cause bias effects and lead to poor scientific results and deviation from the quantitative standpoint. In this respect, my role in previous research had been typical, namely gathering all the data necessary to perform statistical procedures and set out the results. However, as part of this programme, I had an opportunity to conduct more pragmatic research. Indeed, in adopting the survey approach, I tried to maintain highly objective standards, as previously described, but also to follow an action research approach. I was involved in the research strategy, as it enabled me to use my professional experience and tacit knowledge as a sound basis for methods and hypotheses.

I formulated my hypotheses based not only on the literature but also on my professional needs and considerations, so that the outcomes might improve my professional practice and evolution. I was able to apply my sense of real practical IFRS problems, and thus, as Costley and Armsby (2007, p.132) suggest, to provide tangible meaning to the accounting community, evidenced through observable and measurable data. Furthermore, I detected emergent approaches that might strengthen the analytical models, and improved the data collection methods by formulating screening criteria. In this respect, I used my working connections to contact and access companies' annual reports where needed, and was also able, through my work, to access numerous global financial databases that an outsider researcher might have difficulty accessing. With regard to the above arguments, I contributed to this project through my professional knowledge, my implicit understanding of the concepts examined, my methodological data-gathering techniques and collaborations with outsiders.

3.6 Summary

This chapter has outlined the philosophy, methodological design and strategy of the research. Having clarified my ontological and epistemological considerations, I was able to identify myself as a pragmatist researcher and have given detailed reasons for my choice of approach. It was crucial for me to characterise myself as a pragmatist researcher, as this helped me to consider more practical inquiries that would depict my professional problems. This enabled me to better define my research strategy, which I have justified, combining action research with empirical survey. The cycle

process helped me to transform my considerations into practical problems, and facilitated my statistical analysis. Indeed, whenever I identified inappropriate statistics or models that might lead to statistical inaccuracy, I provided the necessary feedback on the procedure and re-started my analysis. In this way, I managed to solve a problem with my FFS models in my first hypothesis. Consequently, I was ready to proceed to the main analysis, which is described in the next chapter, including data collection tools and analysis techniques.

CHAPTER 4: PROJECT ACTIVITY

4.0 Introduction

This chapter sets out the principal activities of my project. My first step was to determine the collection methods for my raw data. I then proceeded to identify my models' variables. More specifically, I applied financial ratios formulated from the companies' financials. Thus, I emphasised quantitative variables that could easily be transformed and subjected to statistical analysis. I was then able to implement my three action research cycles, in which I formulated a total of nine hypotheses, based on my final research questions that emerged from the background to the project, my engagement with the literature and my professional knowledge. I selected models for each hypothesis, so each hypothesis expressed a specific problem connected with IFRS implementation, and resulted in specific outcomes concerning IFRS performance. In this way, I was able to enhance my theoretical and practical knowledge of accounting. Figure 2 summarises the process and methods I used to transform my aims into outcomes.

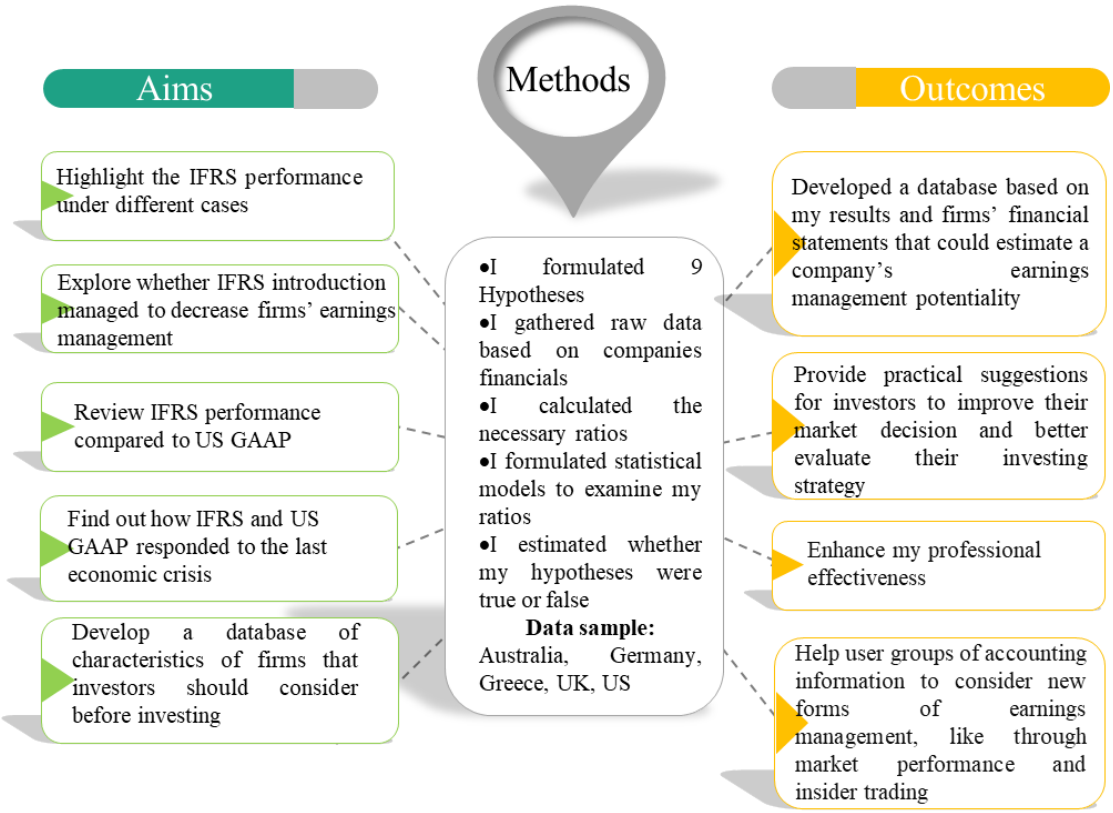


Figure 2: Linking aims, methods and outcomes

4.1 Research Methods

This section introduces the process of analysing my initial raw data to prepare to formulate variables for my main analysis. Methods refer to techniques used to acquire and analyse data (Hay, 2002). In this section, I refer to both data collection tools and data analysis procedures, and both qualitative and quantitative notions also apply to the methods. I have already described their meaning in research design, but in this section, these terms refer to collection and analysis (McMillan and Schumacher, 2006). Quantitative collection methods include written or narrative details other than numbers (Blaxter et al., 1996). They typically involve observations, interviews and questionnaires, opinions or public documents (Sprinthall et al., 1991), and in some cases researchers' impressions and reactions (Myers, 2009). Quantitative gathering methods, on the other hand, focus on numerical data. They emphasise large-scale and representative sets of information with pre-validated measures to enable the numbers to be readily analysed and interpreted (Aliaga and Gunderson, 2000). Various means of collection are used, such as questionnaires and sampling. Thus, many tools, including questionnaires, are common to both methods, but the nature of the data differentiates them.

Furthermore, data can also be categorised as primary or secondary, which has additional effects on the selection of collection strategies. Primary data are those observed or collected by the researcher for the first time, while secondary data are those that have already been published or collected (Saunders et al., 2007). Thus, this distinction inevitably further defines the methods, as it is impossible to gather secondary data from questionnaires or primary data from published sources. Finally, analysis methods are also separated into quantitative methods, where the data are objectively measured and statistically processed, and qualitative methods, which refer to non-statistical analysis techniques. There are many different methods of data collection and analysis, and researchers can apply various combinations, for example combining multi-methods or mixed methods of collection with multi- or mixed methods of analysis (Saunders et al., 2007). However, I applied quantitative methods at both levels, since I used only numerical data, meaning values measured as quantities. Finally, another critical issue that researchers must consider has to do with the time horizon of the research. Cross-sectional studies focus on one point in time, whereas time series use data over a given period (Greene, 1993). I used both methods according to the needs of each hypothesis.

4.1.1 Data sample

In Chapter 1, I justified my decision to examine Australia, Germany, Greece, the UK and the US. In this section, I provide additional details. My data sample can be divided into three sub-categories.

a) In comparing IFRS and old national GAAP, I focused on Australia, Germany, Greece and the UK. I included all companies that had shares listed on the stock markets of these countries. Following previous research (Leuz et al., 2003; Kwan, 2003; Lin and Paananen, 2006), I excluded the financial sector, i.e. banks, and insurance and investment companies. In this way, I increased the homogeneity of my data, as financial firms must follow additional enforcement protocols that might affect IFRS implementation. I also excluded firms that had been delisted during the examined period, and firms that were early adopters, meaning they had adopted IFRS before the official year of 2005, as they had an advantage compared with normal adopters and this might affect the results. Furthermore, I detected many cases of firms listed simultaneously on various stock markets, such as on both the London and Frankfurt Stock Exchanges. Hence, to avoid double-listed firms, I examined such firms only in the stock market of the country in which they had their official head office. In contrast to many previous studies that have used small samples, my research sought to investigate most listed companies of the aforementioned countries, in order to avoid any sampling bias. Overall, a total of 1,366 listed companies was examined for the period 2004–2009. This analysis period was chosen to integrate the impact of IFRS implementation and their improvements, as well as the first consequences of the global financial crisis of 2008.

b) Regarding the comparison between IFRS and US GAAP, this dataset was simpler. I examined companies that were not American but had shares listed on the US stock markets (NYSE, NASDAQ). I focused only on these foreign-listed firms which used to follow US GAAP but had transitioned to IFRS after the SEC granted permission to do so. Thus, an additional 216 firms were detected and examined from 2006 to 2008. Financial firms were also excluded in this case.

c) Finally, regarding the effects of the crisis on accounting regimes, the analysis focused only on companies from the financial sector composed of the banking industry, insurance companies and shadow banking. I included firms from

Australia, Germany, Greece, the UK and the US, and collected information on 679 financial institutions for the period 2009–2013.

I settled on these time frames because I aimed to capture IFRS performance surrounding specific events. These events, as already described, were official IFRS adoption in 2005, IFRS in the US in 2007, and the crisis effects in 2008. Following the literature, I decided to expand my examination to a year before and after this timeframe. This would reduce bias by examining long-term IFRS performance. An appropriate timeframe was therefore essential. For example, Stenheim and Madsen (2017) exhibit different results for the same country, in contrast to Gjerde et al. (2008) who examine a shorter period of firm-year observations. Finally, I assumed that the fiscal year of each company was a full year. This is important because most firms in Australia prefer to release mid-term financial statements. Analytical details of all three sample categories are provided in Appendix II, Table 1, while data issues that emerged during the analysis are described in the next sub-section.

4.1.2 Collection and analysis tools

In view of the nature of the sample and the purpose of the study, I implemented quantitative gathering methods for secondary data. I needed raw and compiled data that would provide or could be transformed into numerical information for statistical analysis (Kervin, 1999). For this reason, I first focused on databases such as Amadeus and Screener, but since they did not provide all the data needed, I searched separately for each firm's financials. In these cases, I also had recourse to economic websites such as Bloomberg, MarketWatch, Morningstar and The Financial Times, and databases such as Factiva and LexisNexis to access companies' announcements, find their official websites, and download firms' annual reports and statements. I also focused on detailed information from the footnotes of annual reports and firms' disclosures and announcements. I manually collected the information, and in certain circumstances referred by hand to quarterly financial statements, especially in my examination of the effects of the crisis. Analytical details of both the specific data I needed and their sources are provided in Appendix II, Table 2.

Through all these standardised procedures, I not only increased the already high reliability and validity of the data, but managed to collect all data, with no missing cases in the ensuing statistical process. Finally, to store and analyse the data, I used Excel software, organised into Excel tables and categorised according to country, year

and fundamental category. I needed the data to be grouped and easily accessed. I checked for double recording issues, and ensured that there were no missing cases. However, there were cases where firms had zero data, such as companies that did not distribute any dividend. I recorded zero in these circumstances, but highlighted these cells to draw my attention to them during the variable calculation process.

4.2 Identification of Variables

All projects in similar research areas support their analysis with variables. Variables depict characteristics of the examined subject, and should therefore be measured and monitored to extract valid results and conclusions. The selection and classification of variables was an essential step in my statistical process, since it defined to a great extent the statistical tests that had to be implemented. Therefore, I needed to understand the differences between types of variable to generate appropriate statistics and enhance my analysis models. Although many different methods could have been used to describe and categorise them, I identified my variables according to their level of measurement and their type within the statistical process (Saunders et al., 2007), always focusing on the needs of each hypothesis and previous similar research.

1. Levels of variable measurement

Although variables have specific levels of measurement, in some cases their categorisation may be confusing. In general, most research divides variables into two broad categories according to the level at which they can be measured. Categorical variables describe a characteristic of a data unit, the values of which cannot be measured numerically, whereas numerical variables have values that can be measured numerically as quantities (Saunders et al., 2007). Categorical variables can be further subdivided into ordinal (ranked) and nominal (descriptive). In the former, the values can be logically ordered or ranked (Blumberg et al., 2008), while in the latter, observations cannot be organised in a logical sequence.

Furthermore, many statisticians consider nominal variables as a third separate sub-category, which have only two values of data, referred to as dichotomous variables (Morris, 2003). Numerical variables can also be further subdivided as either continuous or discrete. A continuous variable is a numerical variable with observations that can have any value, whereas discrete variables can only take distinct and precise values, which must be integers (Dancey and Reidy, 2008). Alternatively,

numerical variables can be either interval or ratio. Interval variables cannot state the relative difference between two values, whereas ratio variables enable this difference to be stated. This is attributable to the fact that in the first case, the zero value does not represent a true zero (Krebs, 1972).

However, in applying the statistical process, this categorisation may provoke problematic issues. Most statistical programs accept only numerical values, meaning that categorical data must be coded, which may lead to confusion between ordinal categorical and numerical discrete variables (Polgar and Thomas, 1995). However, the SPSS statistical program that I used has only three levels of measurement, namely scale, ordinal and nominal, and two categories, numerical and string data. In light of this, for my main analysis, I used numerical scale variables (Appendix II, Table 3), while any categorical variables were recorded numerically, as described in Section 4.3. I thus excluded any unnecessary categorisation and focused the statistical process on identifying appropriate types of variable.

2. Types of variable

Identifying and selecting appropriate types of variable involves judgment in order to avoid flawed conclusions. It is critical to understand and appropriately manipulate types of variable in order to make correct inferences. Classifying variables according to type is relatively straightforward. Thus, when applied to research, variables are generally classified as independent or dependent (Dominowski, 1980). An independent variable is one that affects or causes an outcome. This outcome is the dependent variable that is influenced by the independent one. Furthermore, as contemporary research uses more complicated statistical procedures, there is a need to define additional types of variable to enable proper analysis and meaningful results. There are thus further variable types, such as confounding, moderating and mediating variables and variables of interest (Neuman and Robson, 2004).[16] In my statistical analysis process, inputs into the research models consisted of continuous numerical independent variables used to compare the performance of dependent variables in parametric tests. In most cases, the dependent variables were categorical variables classified as dichotomous. Finally, I also used discrete independent variables, which

[16] Confounding variables are those that influence the dependent variable. Moderator variables influence the relationship between two other variables, while a mediator explains the relationship between the two other variables (Baron and Kenny, 1986). Finally, variables that do not cause any correlation are labelled as variables of interest (Neuman and Robson, 2004).

were used in some cases as moderator variables (Baron and Kenny, 1986). Details of the variables selected are given in descriptions of the tests for each hypothesis in Section 4.6, as well as in Appendix II, Table 3.

4.3 Preliminary Analysis of Variables

Having formulated the hypotheses and identified the variables, I needed to devise, analyse, organise, prepare and store these variables to proceed with the research. These actions had be detailed and carefully implemented, as they supported the main analysis and might permit greater confidence in the main findings. For this, I applied the following three steps (Saunders et al., 2016). The first step included the data layout. All variables were organised into tables and matrices based on country, year and hypothesis criteria. The data had to be correctly formulated and grouped according to the needs of each hypothesis, enhancing chronological and regional assessments. Files were split into separate sub-groups using the above patterns in such a way as to facilitate each case and to remove the need to re-enter the same data.

These tables were saved in Excel files, with appropriate labels, while attention was given to a storage format that would be compatible with SPSS analysis software. The next step consisted of coding and transformation of the data to enable appropriate formulation and statistical preparation. Most variables were numerical. However, in some cases, it was necessary to recode the data using numerical codes, in order for them to be correctly recognised by the statistical program. I calculated a year dummy for logistic regressions, numerically coded the FFS firms and insiders' trading positions, and coded auditors' size. Furthermore, where needed, as in the first hypothesis, I transformed the data to prepare for longitudinal analysis.

The final step included the maintenance of minimum data input quality according to the specific standards of each test, and a check of the sample to ensure that it was compatible for all years examined with the same measurement units. An appropriate data layout at the first stage and the fact that there were no missing raw data facilitated this step. The variables were filtered for any recording errors, focusing on illegitimate or misinterpreted cases. At the same time, I detected any cases of number omissions and/or inaccuracies, and deleted any repeated measurements. Data with numerical problems were not interpreted. In addition, owing to the large amount of data and because tests for linearity and normality were implemented in the principal

analysis of the final models, I checked for possible outliers, focusing only on any extreme values in my sample.

At this preliminary stage, the skewed population had not been transformed through any statistical tools (Anderson, 2003). For all these error and outlier cases, I cross-checked the raw numbers again from additional resources to detect any misinterpretation. Thus, in my final variables sample, in which all these errors and irrelevant ratio data were coded as '999.8', these were easily excluded from the tests. Finally, I also carried out statistical procedures at this stage (Polgar and Thomas, 1995), as I calculated descriptive statistics for these variables to summarise, describe and present inferential characteristics of countries and firms (Sim and Wright, 2000).

Overall, during this preliminary analysis, all the data were observed to be complete, legible, comprehensible and consistent. For this reason, the volume of data gathered and processed makes them difficult to present in tables; however, Appendix II, Table 4 displays a sample of ratios for the first 50 companies of each country examined, while files containing all my data and ratios are available on request.

4.4 Accounting Data Estimation Models: Scientific and Practical Viewpoints

Data analysis and estimation models in the accounting sector usually use quantitative analysis based on statistical models. Most researchers perform analysis on panel data, such as time series and pooled cross-sectional observations, and these models predominate because they provide better opportunities to answer financial research questions. For this reason, researchers use econometric models for hypothesis testing, mainly including linear regressions, univariate and multivariate time series models, logistic regressions, volatility models, standard fixed effects (FE) estimation and least-squares correlation (Kiviet, 1995; Bruno, 2005). These mathematical models are extremely valuable and necessary to transform theories into practical concerns, contributing to scientific examination, explanation and causation. Of course, choosing between them depends on the objectives of the analysis and the problems examined, in conjunction with the variables used. Thus, aiming to strengthen their statistical performance, researchers have established general scientifically approved models, such as discretionary accrual models, event study methods, cumulative abnormal returns estimation, and cost of equity capital estimation models. I explain these models in Section 4.6, as most were used in this study.

These models preserve the primary characteristics of methods generally applied in financial studies, namely statistical analysis and hypothesis testing, with slight variations from model to model and study to study. For example, Jones's (1991) model is unable to detect significant variations in accruals. Thus, researchers have modified her accruals model (Dechow et al., 1995) to be regressed with cash flow from operations (Larcker and Richardson, 2004) or with prior-year returns on assets (Kothari et al., 2004). Nevertheless, these models are subject to similar limitations. Consequently, many researchers use DeFond and Park's (2001) model, which is based on the firm's separate accruals, avoiding any country bias.

However, Houqe et al. (2016) estimate both methods and conclude that both DeFond and Park's (2001) and Jones's (1991) models, with respect to their metrics on the impact of IFRS, lead to similar findings. It seems, therefore, that many models, despite contributing to the evolution and accuracy of financial research, may give rise to scientific and practical concerns. Indeed, although they impose restrictive requirements on their implementation, various complexities and debates arise in empirical accounting research. Sample heterogeneity is a common problem in such projects (Wintoki et al., 2012), while correlation residuals and the potentially fractional nature of the dependent variable may lead to statistical bias and inconsistency (Nickell, 1981). This problem may be exacerbated by the performance of the independent variables, adding to the statistical insignificance of the model owing to the presence of residual autocorrelation, and leading to invalid results (Arellano and Bond, 1991). All these problems may have significant implications for the outcomes of research. To overcome these scientific issues, and because accounting research is extremely sensitive to their estimation techniques, a growing number of recent studies combine the calculation of more proxies. Using simultaneous estimation methods for these models eliminates statistical risk, strengthens the presentation and responds to criticisms.

Furthermore, in addition to the above scientific advantages and concerns, there are also considerable practical issues and empirical challenges. The methods may be impacted on by measurements and values or functional forms, leading to anticipation effects with practical concerns (Aubert and Dumontier, 2007). Indeed, in many cases, models have led to opposite results in practice. In this respect, research must consider the nature of the dataset along with any industry- and country-specific differences in business processes (Burgstahler et al., 2004).

Some studies perform accurate statistical analysis, but since they do not consider differences between characteristics of the examined country of the initial model and those of the corresponding country of their model, they generate inaccurate results in practice. This is highly important in accounting estimation models. The same considerations affect studies that fail to carefully select and distinguish models originating from continuous categorical variables for unbounded dependent variables, affecting the performance of the model (Loudermilk, 2007). Consequently, in many cases, multivariate analysis has been used with only one dependent variable. The time frame being examined may also have considerable practical effects. For example, some models insist on a short, specific event window (Daske et al., 2007), resulting in opposite outcomes on abnormal returns, while on many occasions, models have been used with a reference year that leads to ambiguous returns. For all these reasons, I aimed to carefully formulate and implement the following models.

4.5 Data Analysis Models Selected for the Research

For the main data analysis, I aimed to test data associations, to assess the strength of their relationships and differences, and to examine any trends, based on classical statistical methods (Tukey, 1977). As described previously, these methods focus on a number of parametric statistics and, more specifically, on univariate and multivariate statistical tests, such as Pearson's correlation coefficient, binary and multinomial logistic regression analysis, ordinary least squares (OLS) regression analysis and multilevel models. In addition, independent sample F-tests and t-tests were performed to test the accuracy of the standard deviation and significance of the mean respectively, to contribute to the comparability of the index across values (Pallant, 2005). Each test is useful for analysing specific value categories according to the needs of each hypothesis,[17] and despite their differences, as parametric analysis methods they follow a number of shared assumptions, including levels of measurement and sample size requirements.

In particular, the project considered the assumptions of linearity, normality, homogeneity and independence. Linearity refers to the relationship between the dependent and independent variables, which should be linear and is easily examined

[17] Logistic regression, for example, is useful in analysing categorical data, as the dependent variable is dichotomous and takes only two values, i.e. 0 and 1 (Pindyck and Rubinfeld, 1981). Multinomial regressions are appropriate for more than one explained variable, while linear regression cannot be used with categorical dependent variables.

through residual plots. Furthermore, the numerical data were examined to establish whether they followed a normal distribution. For this reason, the study employed Wilcoxon, skewness and kurtosis tests (Adams et al., 1999; Pallant, 2005). Although the sample was relatively large, applying the central limit theorem (Argyrous, 2006), the data were treated carefully because of possibly skewed distributions (Adams et al., 1999). Outliers that might significantly affect the empirical results were excluded from the standardised residuals. Concerning the homogeneity of variance, I tested whether controlled and measured data had equal variances (homoscedasticity) or not (heteroscedasticity). The analysis software contains statistical tests for this purpose, and I used Levene's (1960) test. Finally, particular attention was paid to the independence of measures, meaning the absence of correlation between two or more independent variables, to avoid collinearity or multicollinearity, respectively. Multicollinearity might potentially cause misinterpretation of the contribution of independent variables, as this makes it difficult to determine their separate effects, leading to numerical problems. Possible cases of multicollinearity were detected through examination of standard errors. A standard error larger than 2.0, excluding the constant, might indicate this problem (Wichers, 1975).

All these methods were assessed according to the relative significance of the estimated coefficients (p-value < 0.01, two-tailed), and additional parameters were also measured. The parameters for logistic regressions were determined based on the maximum likelihood method, and diagnostic tests of significance were based on the Wald statistic. The Wald test evaluates whether the independent variable is statistically significant in differentiating between two groups. In addition, utility estimations were based on proportional by chance accuracy criteria, which were preferred over proportional reduction in error. These were computed by squaring and summing the proportion of cases for each group (Bayaga, 2010; El-Haib, 2012). For the OLS regression, a White test was performed, focusing on the correlation coefficients among the test variables and the R-squared measure. The predictive accuracy of the models and the consistency of the estimates were assessed in this way.

Overall, this section has described the general framework of methods used to analyse the data and the assumptions that were satisfied in each case. Nevertheless, as the models relate to additional factors for each hypothesis, I separately examined these methods based on their individual needs. In the next sections, I provide further details of the structure of the variables and their preliminary analysis, along with

descriptions of the project's specific models. In this respect, considering my sample and variables, and given the concerns described previously, I adopted several different models. Based on the needs of each hypothesis, I selected the best alternative methods for analysis, considering their practical applicability and scientific acceptance. Finally, I analysed these models through the SPSS statistical program, apart from Test 2/H1, where I used STATA and the student's version of HLM as they offered greater possibilities for longitudinal analysis. Brief points concerning the selected statistical tests are shown in Appendix II, Table 5, and specific details of the models are presented in the following sections, separately under the theme of each hypothesis.

4.6 Hypothesis Development and Models

4.6.1 Cycle I: IFRS versus old GAAP versus IFRS improvements

The general framework of the three following hypotheses sought to compare IFRS with the old national GAAP of Australia, Germany, Greece and the UK. Considering also the amendments to IFRS (Appendix II, Table 6), I formulated the following hypotheses to detect which country performed better, as they previously exhibited significant differences (Appendix II, Table 7). This set of hypotheses aimed to answer the first set of initial research questions (Q1).

H1: The introduction of IFRS has decreased falsified financial statements and improved auditing quality.

This first hypothesis aimed to shed light on several issues originating from the official introduction of IFRS and relating to the manipulation of earnings. Although earnings management has been the most investigated theme since the introduction of IFRS, I aimed to initiate more critical values for its detection. Creative accounting and fictional finance have caused many scandals, even though in most cases it has been illegitimate and costly for investors. Thus, through this hypothesis, the research sought not only to discover any decrease in the number of firms with falsified financial statements (FFS), but also to detect specific increases or decreases in each firm's accruals over a period of years. This is the first study to examine accruals in time series, and is also the first attempt to identify the individual standards that have an impact on earnings management. Of equal importance was my intention to contribute information to whether auditors displayed appropriate reflection in IFRS implementation, concerning their quality, technical capability, size and independence.

All listed firms are required to have their financial statements audited. Yearly forensic accounting procedures aim to provide stakeholders with an assurance of proper financial statements and discover any material misstatements or cases of fraud (DeAngelo, 1981). Thus, it is essential to detect whether big auditing companies have benefited from IFRS implementation or whether smaller auditors have managed to eliminate their distance, performing equally well in crucial matters such as accruals detection. In addition, as legislation concerning auditors' reports differs among countries that follow IFRS, this was a good opportunity to test each country's performance. This hypothesis is critical to IFRS implementation, with additional extensions that apply even in their convergence with US GAAP. Many consider that postponement of this venture was attributable to differences in auditors' regulation, as US authorities provide more restricted and responsible roles for auditors than IFRS. Thus, I ran the next tests.

TEST 1: Falsified financial statements (FFS) and IFRS

The project aimed to detect any decrease in FFS following the adoption of IFRS and to specify financial ratios that might affect this phenomenon. Focusing on auditors' opinions for each year, authorities' reports and Altman's Z-score, I classified each company for every year as FFS or not.[18] For FFS, I noted companies with reports giving a qualified auditors' opinion, companies that had been involved in fraud cases and companies with negative or extremely low Altman's Z scores. Altman's Z-score is used to determine the likelihood of a company going bankrupt. For public companies, the Z-score is calculated as follows (Altman, 1968, 1983):

Z = 1.2(Working Capital / Total Assets) + 1.4*(Retained Earnings / Total Assets) + 3.3*(Earnings Before Interest and Taxes / Total Assets) + 0.6*(Value of Equity / Book Value of Total Liabilities) + 1.0*(Sales/ Total Assets)* *(1)*

Having calculated this possibility for each firm and each year, I performed the next two sub-tests.

[18] For this test, I initially considered following Spathis's (2002) FFS equation. However, I noticed that my results based on this model, or on similar methods as referred to by Dalnial et al. (2014), such as multilayer perceptron neural network (MLP), probabilistic neural network (PNN) and radial basic functions network (RBF), did not produce accurate results for the purposes of this project, as I had to formulate new equations for every examined year. This would have been time-consuming, with unpredictable accuracy. Thus, I preferred to manually select the possibility of a firm having FFS.

a) In the first sub-test, I tested the next multinomial logistic regression to detect any FFS decrease over the years of IFRS implementation:

$$RR_{i,t} = a_0 + a_1\, Size_{i,t} + a_2\, Investment_{i,t} + a_3\, Growth_{i,t} + a_4\, Profitability_{i,t} + a_5\, Liquidity_{i,t} + a_6\, Leverage_{i,t} + a_7\, FFS_{i,t} + e_{i,t} \quad (2)$$

where, $RR_{i,t}$ is equal to 0 for 2004, 1 for 2005, 2 for 2006, etc., and $FFS_{i,t}$ is a dummy for FFS that takes a value of 1 if falsified and 0 otherwise; for other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

The project implemented this regression type, as it aimed to follow firms' performance for several years (2004–2009) so as to include the effects of adoption in 2005 and any crisis effect in 2008. For this, I chose 2004 as the reference year. A negative FFS value would indicate a decrease in FFS.

b) Moving a step further, I examined the association of firms' ratios with FFS. The following binary logistic regression was performed:

$$FFS_{i,t} = a_0 + a_1\, Size_{i,t} + a_2\, Investment_{i,t} + a_3\, Growth_{i,t} + a_4\, Profitability_{i,t} + a_5\, Liquidity_{i,t} + a_6\, Leverage_{i,t} + e_{i,t} \quad (3)$$

where $FFS_{i,t}$ is a dummy for FFS that takes a value of 1 if falsified and 0 otherwise; for other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

This model contributed to the profiling of differences in a number of critical ratios between FFS and non-FFS firms over a period of six years (2004–2009).

TEST 2: Longitudinal analysis of accruals

One significant conclusion from my engagement with the literature was the fact that earnings management continues to be a contemporary issue and that most researchers accept the correlation between accruals and earnings management. Thus, many papers suggest that under IFRS, discretionary accruals are lower as a result of more transparent transactions (Renders and Gaeremynck, 2007; Jermakowicz and Gornik-Tomaszewski, 2006). However, as they all focus on cross-sectional procedures, they usually detect the average effects of the variables examined. Therefore, the results are often mixed, and it is impossible to determine firms' individual accruals performance over a period. Through this test, I aimed to fill this gap, as I attempted to observe firm-by-firm accruals over a period of six years (2004–2009).

This test enabled me to detect whether firms that managed to lower their accruals under IFRS adoption preserved this capacity during the crisis, and vice versa. The first step in this test was to determine an appropriate method for accruals calculation. Most models separate accruals into non-discretionary (normal) and discretionary (abnormal). The absolute value of the abnormal component determines the quality of earnings, meaning that the larger the absolute value of discretionary accruals, the lower the quality of earnings. This study used the residuals of the following regression as discretionary accruals (DAC), based on the Jones's (1991) model (see also Bartov et al., 2001; Kothari et al., 2004):

$$AC_{i,t} = a_0\,(1/A_{i,t-1}) + a_1\,REV_{i,t} + a_2\,PPE_{i,t} + e_{i,t} \qquad (4)$$

where $AC_{i,t}$ is accruals in year *t* scaled by lagged total assets (total assets in year *t*-1); accruals equal the annual change in current assets (excluding cash) minus current liabilities (excluding short-term debt and income tax payable) minus depreciation; $A_{i,t-1}$ is the total assets in year *t*-1; $REV_{i,t}$ is the annual change in revenues in year *t* scaled by lagged total assets; $PPE_{i,t}$ is property, plant and equipment in year *t* scaled by lagged total assets; and $e_{i,t}$ is the error term. As previously noted, all variables in the model are scaled by lagged assets, meaning assets from the previous year, to reduce heteroscedasticity (Jones, 1991). In general, a high level of discretionary accruals would indicate relatively low earnings quality.

For the main examination of this hypothesis, multilevel analysis was used.[19] The model was decomposed into two parts (Level 1 and Level 2), following studies by Liang and Bentler (2004), Longford and Muthen (1992) and Yuan and Bentler (2007). The Level 1 model represents the amount of change for a specific individual (firm) over the time period of the study, while the Level 2 model represents the relationship between Level 1 growth parameters and time-invariant characteristics of the individuals. More specifically, I implemented the following model:

$$\textit{Level-1: } y_{i,t} = \pi_{0,i} + \pi_{1,i}\,(Time_{i,t}) + \pi_{2,i}\,(TimeGroup_{i,t}) + e_{i,t} \qquad (5)$$

[19] I came to this decision for two reasons. First, multilevel methods present a number of advantages concerning assumptions, such as linearity, normality and independence of observations, compared with similar traditional models such as repeated measures ANOVA (Garson, 2013). This elasticity was essential for my sample. Second, traditional statistical procedures assess changes in only one type of variable (intra-individual or inter-individual) in a time frame, while multilevel modelling offers the ability to simultaneously assess both types (Laird and Ware, 1982). In this way, I enforced the FFS results of the previous Test 1 by adding this parameter to the Level 2 test.

where $y_{i,t}$ is the criterion variable for individual i at time t; $\pi_{0,i}$ is the intercept for individual i; $\pi_{1,i}$ is the slope for individual i; $Time_{i,t}$ is an explanatory variable (as time is used as an explanatory variable at Level 1, this model is conceptualised as longitudinal; Raudenbush and Bryk, 2002); $\pi_{2,i}$ is the regression weighting for explanatory variable $TimeGroup_{it}$; $TimeGroup_{i,t}$ is an additional dummy explanatory variable (0 for the period 2004–2006 and 1 for the period 2007–2009); and $e_{i,t}$ is the error term.

$$Level\text{-}2: \pi_{0,i} = \beta_{0,0} + \beta_{0,1}(FFS_{i,t}) + r_{0,i} \quad (6)$$

$$\pi_{1,i} = \beta_{1,0} + r_{1,i}$$

where $\pi_{0,i}$ is the intercept for individual i; $\pi_{1,i}$ is the slope for individual i; $\beta_{0,0}$ is the population intercept for individual i; $\beta_{0,1}$ is the difference in population intercept for a change in FFS; $FFS_{i,t}$ is the dummy variable for FFS from Test 1; $\beta_{1,0}$ is the population slope; $r_{0,i}$ is the unique effect for individual i on the intercept; and $r_{1,i}$ is the unique effect for individual i on the slope.

The Level 2 model consists of two equations: $\pi_{1,i}$ depicts the Level 1 change coefficients and $\pi_{0,i}$ the Level 2 change. In this equation, I added the FFS variable as a time-invariant predictor because I aimed to examine the interaction of FFS with the individual change intercept rather than the slope. I also intended to detect the relationship between accruals and FFS firms throughout the examined period, rather than for separate time groups. Thus, I considered that there would be no implications if I did not include the $TimeGroup_{i,t}$ explanatory variable in the Level 2 model. The full model is as follows:

$$Full\ model: y_{i,t} = [\beta_{0,0} + \beta_{0,1}(FFS_{i,t}) + r_{0,i}] + [\beta_{1,0} + r_{1,i}(Time_{i,t})] + e_{i,t} \quad (7)$$

All variables have already been defined, and I estimated the nine parameters of the full model using restricted maximum likelihood (REML).[20]

[20] In general, likelihood models seek to estimate the probability of a parameter for a given outcome. The REML approach differs from maximum likelihood (ML) estimation in considering that some parameters have little importance for the model. It uses transformed data to eliminate the effects of these parameters and then calculates the likelihood function, whereas ML does this for all parameters (Upton and Cook, 2014). Overall, REML seems to produce more accurate estimates of random variances, while ML is appropriate for fixed regression parameters (Twisk, 2006).

TEST 3: To what extent do individual standards impact on earnings management?

Having examined firm-by-firm accruals performance in the previous test, it seemed interesting to examine the individual standards that had the most effect. As referred to before and applied in this case, most studies examine specific variables to detect earnings management, without considering separate standards that might affect these values. I aimed to contribute to the literature in this way, as this is the first study to correlate accruals with the materiality of the impact caused by each standard and the frequency with which these individual standards appear to affect earnings management. Based on Tsalavoutas and Evans (2007) and similar studies, I assessed the partial index to compare two consecutive years of IFRS implementation.[21] I was thus able to consider which particular standards correlated most with creative accounting practices, and whether any of their amendments had been effective. The research focused on firms that provided information in their statements in relation to the financial measures that I aimed to examine. More specifically, my analysis was based on a partial index of materiality, as introduced by Gray (1980) and proposed by Cordazzo (2008). The equation for the partial index of this proportionality for accruals was:

$$PI\ (DAC)_{i,j,t} = \frac{PA_{i,t}}{\left|DAC_{i,t-1}\right|} \qquad (8)$$

where $PI\ (DAC)_{i,j,t}$ is the partial index of materiality for item j to accruals of company i at time t; $PA_{i,t}$ is the partial adjustment, meaning the difference between the amount of individual standards in years t and t-1; and $DAC_{i,t-1}$ is the discretionary accruals of company i at time t-1. If the partial index equals 0, the individual standard has no impact on accruals; if the index assumes a value greater than 0, this indicates that accruals have increased, so there has been a negative impact of this standard for my analysis; and if the result is lower than 0, this indicates a positive impact.

The index was calculated for each country for the years 2005–2009. I excluded 2004, as I aimed to focus only on the IFRS period. Materiality was divided into five categories according to the mean and standard deviation of the examined parameters. Finally, to develop my dataset of the individual standards examined, I focused on

[21] Most research that applies partial index methods focuses on reconciliation statements to detect individual standards' effects on shareholders' equity and net income for a specific year. In my research, rather than reconciliation statements, I focused on two different years; and rather than shareholders' equity or net income, I examined accruals.

direct and indirect measures that affect discretionary accruals calculation according to the literature. Thus, I detected any separate standards that influenced these measures to complete my dataset (Appendix III, Table 6).

TEST 4: Auditors' size and quality of financial statements

Many studies in the second phase of the literature review expressed concern about the qualifications of accountants and auditors to enable them to respond to the requirements of the new standards. However, after the official IFRS adoption, these concerns reduced. Therefore, through this test I aimed to re-surface this issue by determining the relationship between auditors and earnings management, taking into account cases where auditors changed.

a) Previous studies focusing on auditing firms separate their samples according to size. This is a common practice that has led to the adoption of two categories: the Big 4 audit firms comprising the four largest firms, and the non-Big 4 auditors that include the remaining companies.[22] The research followed this categorisation to answer the question of whether, following IFRS implementation and the outbreak of the crisis, an auditor's size was still a factor that might eliminate earnings management. Early studies conclude that larger audit firms place greater constraints on earnings management (Burgstahler et al., 2004). However, given that my dataset contained a different profile of auditors, it seemed interesting to compare countries where listed firms tend to put their trust in companies other than the Big 4, such as Greece, with countries where Big 4 auditors are in the majority, as in the UK. For this, the following linear regression model was used:

$$DAC_{i,t} = a_0 + a_1\ DV_{i,t} + a_2\ DV_{i,t}\ Size_{i,t} + a_3\ DV_{i,t}\ Profitability_{i,t} + a_4\ DV_{i,t}\ Leverage_{i,t} + e_{i,t} \quad (9)$$

where $DAC_{i,t}$ is discretionary accruals estimated using the cross-sectional Jones (1991) model; $DV_{i,t}$ is a dummy variable representing whether a company has a big auditor; $DV_{i,t}$ equals 1 if a firm is audited by a Big 4 company and 0 otherwise; $DV_{i,t}Size_{i,t}$ is the size ratio as described in Appendix III, Table 1, multiplied by $DV_{i,t}$ (used to examine the impact of auditors' size on the association between discretionary accruals and firm size); $DV_{i,t}Profitability_{i,t}$ is the

[22] The Big 4 refers to the four largest accounting firms in the world: Deloitte Touche Tohmatsu Ltd (DTTL), Pricewaterhouse Coopers (PwC), Ernst and Young (E&Y) and Klynveld Peat Marwick Goerdeler (KPMG). All other companies are characterised as non-Big 4 auditors.

profitability ratio as described in Appendix III, Table 1, multiplied by $DV_{i,t}$ (used to examine the impact of auditors' size on the association between discretionary accruals and profitability); $DV_{i,t}Leverage_{i,t}$ is the leverage ratio as described in Appendix III, Table 1, multiplied by $DV_{i,t}$ (used to examine the impact of auditors' size on the association between discretionary accruals and leverage); and $e_{i,t}$ is the error term.

b) An equally important consideration relating to earnings management is auditors' rotation. From my working experience, I have noticed that a longstanding business relationship with auditors may lower auditors' reflectiveness. Therefore, a change in auditor may decrease fraud motives, suggesting that a more rapid mandatory change would result in cost reductions and a decrease in Big-4 dominance, but most importantly in increased quality. I followed the previous regression model (9) to detect whether firms that had rotated their auditors had lower accruals. The $DV_{i,t}$ value equals 1 for firms that had changed their auditors and 0 for firms that had not. The remaining variables remain the same as in Equation 9.

H2: Under IFRS firms demonstrate a decrease in speculative insider-trading cases

Phase III of the literature review revealed that earnings management may increase a firm's stock value (Jiraporn et al., 2008). This is attributable to the fact that stock markets reflect companies' financials, meaning that the higher the reposting results, the better the firm's market performance (Junttila et al., 2005). Most research considers this correlation to be one-way, as described, but as a market participant, I believed it might also work in the opposite direction. Thus, an increase in a company's stock value may increase its financials. An additional parameter was required to examine this claim: insider trading activity. Insider trading is the involvement in a transaction of a person with a close interest in the firm, such as a director, officer, senior manager, employee or associate, as well as other relevant persons connected to them, such as family members. In general, these dealings are legal and, in many cases, necessary, as long as there is no misuse of privileged information. However, insider trading started to have negative connotations after its correlation with financial misstatements, accounting manipulation and scandals. There

seemed to be a gap in the regulations on information that firms reveal publicly, and in some cases firms used reinstatement processes to hide their managers' insider trading.

For this reason, IFRS increased obligatory disclosures of stakeholders' and stockholders' market activity, no longer allowing them to take advantage of any internal information. Many consider that this enforcement of insider trading may increase the transparency of financial information (Hail et al., 2014; Christensen et al., 2016). Nevertheless, in recent years there has been an increase in indications of insider information and privileged access to important data. Indeed, there are even cases where insiders have engaged in suspicious transactions, for instance buying stocks before an important announcement. An unexpected increase in directors' buying activity may suggest fraudulent dealing, especially if it is accompanied by a share price increase. The restrictive laws on investor protection that followed IFRS, forcing top managers to make their holdings public, among other things, seem to have resulted in little improvement.[23] Advance knowledge may prove crucial because stock market participants need to know about cases of insider trading to make their trading decisions, although it is hard to detect in time.

Thus, the following tests examined the effectiveness of this measure, determining firms' performance under IFRS compared with old GAAP, as well as identifying insiders' activity in stock markets and evaluating whether insiders used this as a tool to increase the company's value or financials, or both. The first two sets of tests concentrated on the comparison between IFRS and old GAAP, so I focused on the period 2004–2006, while the third set focused from 2007 to 2009 to include any crisis effects. I considered directors, officers, senior managers, employees and associates, as well as others closely related to them, as insiders. Finally, for all relevant tests, I estimated both purchases and disposals by insiders.[24]

TEST 1a: Decrease in insiders' purchases under IFRS

In order to examine the performance of insiders' purchases, I estimated the following logistic regression:

[23] There is huge variance in legal sanctions between countries concerning insider trading, from 10-year sentences in the US to two years in France. The US has the longest and strictest history of insider trading regulations and is considered to have influenced other countries (Bhattacharya and Daouk, 2002).

[24] In order to adequately outline the performance of insider trading, the research focused on both purchases and disposals by insiders, although many studies insist that stock purchases rather than sales are more likely to be led by new information concerning firms' future prospects, sending a stronger signal of possible fraud (Lakonishok and Lee, 2001; Fidrmuc et al., 2006).

$$RR_{i,t} = a_0 + a_1\ HBVALUE_{i,t} + a_2\ LBVALUE_{i,t} + a_3\ Size_{i,t} + a_4\ Profitability_{i,t} + a_5\ Leverage_{i,t} + e_{i,t} \quad (10)$$

where $RR_{i,t}$ is a dummy variable indicating the examination year, equalling 0 for the first year and 1 for the next. I had two sets: 2004 (0) versus 2005 (1), and 2005 (0) versus 2006 (1). $HBVALUE_{i,t}$ is a dummy variable indicating cases of high-value trades, meaning directors' deals higher than £1 million. This dummy equals 1 if the total value of shares purchased by directors of firm *i* during year *t* exceeded £1 million and 0 otherwise. $LBVALUE_{i,t}$ is the opposite of the previous dummy. It equals 1 if the trade value of insiders' purchases was lower than £1 million and 0 otherwise. For other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

TEST 1b: Decrease in insider disposals under IFRS

The next logistic regression was similar to the previous one (10), focusing on insiders' disposals.

$$RR_{i,t} = a_0 + a_1\ HSVALUE_{i,t} + a_2\ LSVALUE_{i,t} + a_3\ Size_{i,t} + a_4\ Profitability_{i,t} + a_5\ Leverage_{i,t} + e_{i,t} \quad (11)$$

where $RR_{i,t}$ is a dummy year variable, as previously defined (Equation 10). Similarly, *HSVALUE* is a dummy variable indicating the value of shares disposed of. It equals 1 if the total value of shares sold by directors of firm *i* during year *t* exceeded £1 million and 0 otherwise. $LSVALUE_{i,t}$ is the opposite of the previous dummy. It equals 1 if the trade value of insiders' disposals was lower than £1 million and 0 otherwise. For other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

TEST 1c: Decrease in the number of insiders

Similarly, the next logistic regression focused on the number of insiders:

$$RR_{i,t} = a_0 + a_1\ BID_{i,t} + a_2\ SID_{i,t} + a_3\ Size_{i,t} + a_4\ Profitability_{i,t} + a_5\ Leverage_{i,t} + e_{i,t} \quad (12)$$

where $RR_{i,t}$ is a dummy year variable as defined in Equation 10; $BID_{i,t}$ is the total number of insiders that bought firm *i*'s shares for a specific year *t*; and $SID_{i,t}$ is the total number of insiders that sold firm *i*'s shares for a specific year *t*. For other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

TEST 2: Accruals and insider activity

To achieve a more detailed analysis of insider trading, I aimed to examine the relationship between accruals and directors' activity. For this, I performed the following linear regression model, similar to H1/Test 4 (Equation 9):

$$DAC_{i,t} = a_0 + a_1\, DV_{i,t} + a_2\, DV_{i,t}\, Size_{i,t} + a_3\, DV_{i,t}\, Profitability_{i,t} + a_4\, DV_{i,t}\, Leverage_{i,t} + e_{i,t} \quad (13)$$

where $DAC_{i,t}$ is the discretionary accruals estimated using the cross-sectional Jones (1991) model; $DV_{i,t}$ is a binary dummy variable, equalling 0 or 1 according to a number of variations described in the following paragraph; $DV_{i,t}Size_{i,t}$ is the size ratio described in Appendix III, Table 1, multiplied by $DV_{i,t}$, used to examine the impact of auditors' size on the association between discretionary accruals and firms' size; $DV_{i,t}Profitability_{i,t}$ is the profitability ratio described in Appendix III, Table 1, multiplied by $DV_{i,t}$, used to examine the impact of auditors' size on the association between discretionary accruals and profitability; $DV_{i,t}Leverage_{i,t}$ is the leverage ratio described in Appendix III, Table 1, multiplied by $DV_{i,t}$, used to examine the impact of auditors' size on the association between discretionary accruals and leverage; and $e_{i,t}$ is the error term.

Aiming to include all critical variations in insider trading, as in the previous first set of tests, I formulated the value of $DV_{i,t}$ in this equation as follows:

a) I compared firms with no trade activity with firms that had at least one insider trading case. $DV_{i,t}$ equalled 1 if a firm had insider activity and 0 otherwise.
b) I also focused on large purchase values as opposed to small purchases. $DV_{i,t}$ equalled 1 for firms with high purchases (more than £1 million) and 0 otherwise.
c) Similarly, I examined large stock disposals compared with small sells. $DV_{i,t}$ equalled 1 for firms with high disposals (more than £1 million) and 0 otherwise.
d) Finally, I focused on the number of insiders who realised at least one stock market transaction (sell and/or buy). $DV_{i,t}$ equalled 0 for firms that had insider activity by 1 to 4 insiders and 1 for firms whose stocks had been traded by 5 or more insiders.

TEST 3: Insider dealing and abnormal returns

This last test aimed to explore any relationship between insider trading and the firm's stock price. In most cases, companies present such effects close to events such as mergers, dividends and earnings announcements. However, my purpose was to

address the issue of the total effects of a year. In this respect, the project aimed to examine any correlation of insiders with abnormal market returns (AR). AR is the difference between the actual performance of a firm and its expected returns. For this reason and to calculate these measurements, I chose to apply the event study methodology based on the market model method (Strong, 1992), as represented by the following equation:

$$AR_{i,t} = R_{i,t} - (a_i + b_i R_{m,t}) + e_{i,t} \qquad (14)$$

where $AR_{i,t}$ is the abnormal returns of security i in period t; $R_{i,t}$ is the return on security i in period t, calculated as $\text{Log}\left[{(P_{i,t} + D_{i,t})}/{P_{i,t-1}}\right]$, where $P_{i,t}$ is the price of the security at the end of period t; $D_{i,t}$ is the dividend paid during period t; $P_{i,t-1}$ is the price of the security at the end of period t-1, adjusted for any capitalisations to make it comparable with $P_{i,t}$; a_i is the intercept for security i; b_i is the beta coefficient, which measures the sensitivity of security i to the market and is a measure of risk; $R_{m,t}$ is the return of the stock market m in period t; and $e_{i,t}$ is the statistical error term.

To estimate the return of the stock market ($R_{m,t}$), I used ASX for Australia, DAX for Germany, ASE for Greece and FTSE for the UK. A positive AR means that a stock performed better than the market, while a negative one indicates that the stock underperformed the market. Therefore, if a firm exhibits positive or negative AR at the same time as high insider buying or selling respectively, then there is a suspicious correlation between them. Considering all the above, I calculated the annual cumulative AR of a firm along with its ratios and annual insider trading activity, and performed the following regression model, similar to Test 2 (Equation 13). As previously mentioned, in focusing on 2008, I aimed to detect any crisis effects on this phenomenon.

$$CAR_{i,t} = a_0 + a_1 DV_{i,t} + a_2 DV_{i,t}\ Size_{i,t} + a_3 DV_{i,t}\ Profitability_{i,t} + a_4 DV_{i,t}\ Leverage_{i,t} + e_{i,t} \qquad (15)$$

where $CAR_{i,t}$ is the cumulative abnormal market return for firm i in year t, aggregated over an annual window; $DV_{i,t}$ is a binary dummy variable, equalling 0 or 1. I followed the same four categorisations of $DV_{i,t}$ values as in the previous Test 2 (Equation 13), and the remaining independent variables are also as defined in that test (13).

H3: Under IFRS firms exhibit lower cost of equity, without resorting to earnings management procedures

Cost of capital has always been one of the most crucial factors in a company being viable, especially nowadays when liquidity is limited. It is highly important in enabling a firm to remain competitive. Therefore, managers may resort to earnings management to achieve a lower cost of equity. On the other hand, this may lead to the opposite results, as now that liquidity is limited, investors and banks engage in strict due-diligence control and detailed auditing of the company's financials in seeking to confirm the firm's real performance on a multilevel basis. This gives the impression to the market that a company with low capital cost will therefore have been extensively audited and evaluated by the banking sector; thus, it is a sign of trust for investors. I aimed to examine this fact, so I needed to measure firms' cost of equity capital ($COC_{i,t}$) for my models. As there are many methods available to calculate it, I considered previous research (Hail and Leuz, 2006, 2009; Daske et al., 2008; Li, 2010), and decided to use Easton's (2004) PEG ratio:[25]

$$COC_{i,t} = \sqrt{\frac{E_0(EPS_2) - E_0(EPS_1)}{P_0}} \qquad (16)$$

where $COC_{i,t}$ is the Easton (2004) PEG proxy for estimating the cost of equity capital of a firm i in period t; $E_0(EPS_1)$ is the consensus forecast of earnings per share at t+1; $E_0(EPS_2)$ is the consensus forecast of earnings per share at t+2; and P_0 is the stock's price at the end of fiscal year t.

Having calculated the cost of equity, and based on the same methods as the previous hypothesis (H2), I examined the following three tests, aiming to detect whether IFRS had decreased firms' cost of equity, whether this performance was without suspicious procedures, and whether it related to firms' stock market reactions.

TEST 1: Under IFRS firms exhibit lower cost of equity

In this first test, $COC_{i,t}$ was regressed with indicator variables from 2004 to 2006 in order to detect its performance after IFRS adoption. Therefore, I followed the following logistic regression:

[25] I also considered using the Fama and French method (Gebhardt et al., 2001) to calculate cost of equity, but I chose the PEG model as it provides the greatest degree of construct validity (Botosan et al., 2011) for its calculation compared with embedded and external variables based on firms' accounting information.

$$RR_{i,t} = a_0 + a_1\, COC_{i,t} + a_2\, Size_{i,t} + a_3\, Profitability_{i,t} + a_4\, Leverage_{i,t} + e_{i,t} \quad (17)$$

where $RR_{i,t}$ is a dummy variable indicating the examination year, equalling 0 for the first year and 1 for the next. I have two sets: 2004 (0) versus 2005 (1), and 2005 (0) versus 2006 (1). $COC_{i,t}$ is the Easton (2004) PEG proxy for estimating the cost of equity capital of firm *i* in period *t*. For other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

TEST 2: Accruals and cost of equity capital

In this test, I aimed to estimate whether any possible decrease in firms' cost of capital was attributable only to the accuracy of IFRS, or whether an increase in firms' accruals had followed it. For this reason, I again used the same methods as in the previous H2/Test 2 (Equation 13):

$$DAC_{i,t} = a_0 + a_1\, DV_{i,t} + a_2\, DV_{i,t}\, Size_{i,t} + a_3\, DV_{i,t}\, Profitability_{i,t} + a_4\, DV_{i,t}\, Leverage_{i,t} + e_{i,t} \quad (18)$$

All variables were defined as in H2/ Test 2, except for $DV_{i,t}$ values. In this case, firms were categorised using the median of the cost of capital, as calculated by the PEG proxy. Thus, firms were separated into those with high cost and those with low cost of capital. The dummy variable, $DV_{i,t}$ is equal to 1 for firms with low cost and 0 for firms with a high cost of capital. The remaining independent variables are defined as in Equation 13. This empirical analysis also focused on the period 2004–2006.

TEST 3: Cost of capital and abnormal returns

In the last test, I sought to detect any correlation between the cost of equity and firms' stock performance, using the following linear regression:

$$CAR_{i,t} = a_0 + a_1\, DV_{i,t} + a_2\, DV_{i,t}\, Sizei_{i,t} + a_3\, DV_{i,t}\, Profitability_{i,t} + a_4\, DV_{i,t}\, Leverage_{i,t} + e_{i,t} \quad (19)$$

where $CAR_{i,t}$ is the cumulative abnormal annual returns as defined in H2/Test 3; $DV_{i,t}$ is the dummy variable as defined in the previous Test 2; and the remaining independent variables are as defined in Equation 13. This analysis focused on the years 2007–2009 in order to detect any effect of the crisis.

4.6.2 Cycle II: IFRS versus US GAAP

The next three hypotheses correspond with the second initial set of research questions (Q2), to determine IFRS performance in the US compared with US GAAP. With considerable differences in many aspects of accounting, such as goodwill, taxes and asset revaluations (Appendix II, Table 8), it is crucial for IFRS to succeed in this endeavour so that the SEC's strategic plan for IFRS and US GAAP convergence is not postponed yet again. Thus, I focused on the following hypotheses.

H4: The SEC's decision to allow IFRS for foreign firms has increased the level of convergence

The introduction of IFRS aimed to bring European accounting standards closer to US GAAP. Although many insist that IFRS resembles US GAAP, mainly for businesses' convenience, they appear to have major differences. Therefore, every public company had to reconcile its accounting figures with US GAAP. However, in 2007, the US SEC allowed foreign firms listed on the US market to publish their financial statements in accordance with IFRS, without reconciliation with US GAAP. This might be considered as the first step toward a future total convergence of the two standards, and is only one of the measures taken to enhance comparability between the two standards. Apart from any practical concerns, this decision had direct cost-saving advantages for companies.

Even firms that followed Canadian GAAP expedited their IFRS transition as early adopters, in order to take advantage of this decision and avoid reconciliation processes.[26] Contrary to this move, from 2008, European companies also listed on US markets that chose to report under US GAAP were no longer allowed to claim for exemption but had to prepare their consolidated financial statements also in accordance with IFRS. I examined this hypothesis, aiming to investigate early indications of comparability and convergence between the two accounting standards before and after the SEC's decision. Thus, I formulated the following test.

TEST: Convergence after IFRS allowance in the US

After the allowance of IFRS in the US in 2007, many considered that this would eliminate their differences. In order to capture these differences and examine the level of convergence, I adopted the following comparability index measures (Whittington, 2000):

[26] Canada voluntarily adopted IFRS from January 2011 and officially in 2015.

1. The net income absolute difference measure ($DIFF_{NI}$):

$$DIFF_{NI} = \left| \frac{Net\ Income\ (US) - Net\ Income\ (IFRS)}{Net\ Assets\ (IFRS)} \right| \quad (20)$$

2. The net assets absolute difference measure ($DIFF_{NA}$):

$$DIFF_{NA} = \left| \frac{Net\ Assets\ (US) - Net\ Assets\ (IFRS)}{Net\ Assets\ (IFRS)} \right| \quad (21)$$

3. The return on net assets absolute difference measure ($DIFF_{RONA}$):

$$DIFF_{RONA} = \left| Return\ on\ Net\ Assets\ (US) - Return\ on\ Net\ Assets\ (IFRS) \right| \quad (22)$$

4. The earnings per share absolute difference measure ($DIFF_{EPS}$):

$$DIFF_{EPS} = \left| \frac{Earnings\ per\ Share\ (US) - Earnings\ per\ Share\ (IFRS)}{Earnings\ per\ Share\ (IFRS)} \right| \quad (23)$$

I specified earnings and assets, as I had determined that these figures seemed to prevail in differences between the two regimes (Appendix II, Table 8), as also suggested by the literature. My sample consisted of firms that published their accounting statements under IFRS but also reconciled them under US GAAP. I calculated the above measurements for each company for the years 2006–2008, and estimated the mean for each measure for each year. The closer to 0 their mean value, the better the convergence process, while a mean of 0 would indicate total convergence of the two standards. I also carried out a t-test for equality of means to examine the above measurements across years and gain a better picture of this aspect.

H5: Financial statement effects under IFRS for firms that used to follow US GAAP

Acceptance of IFRS has saved companies costs and time in preparing their financial statements, and has simplified investors' decisions as they have more timely access to reliable and clear information, providing easier cross-country and cross-firm comparability. On the other hand, many insist that IFRS may introduce volatility into the US market. Although this may be an advantage for financial reporting, as it reflects timely information, volatility may be disadvantageous to investors and other users if it reflects managerial manipulation. For this reason, this hypothesis aimed to

detect, among the effects of their differences, the level of volatility introduced into firms using IFRS in the US market. Consequently, I examined the following tests.

TEST 1: Financial statement effects

This test aimed to detect any financial effects following acceptance of IFRS for use in the US. The following logistic regression model was used:

$$RR_{i,t} = a_0 + a_1\, Size_{i,t} + a_2\, Investment_{i,t} + a_3\, Growth_{i,t} + a_4\, Profitability_{i,t} + a_5\, Liquidity_{i,t} + a_6\, Leverage_{i,t} + e_{i,t} \quad (24)$$

where $RR_{i,t}$ is a dummy variable indicating the year of the reported numbers, equalling 0 for the year before the acceptance and 1 after; for other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

TEST 2: Income volatility in accounting measures

This second statement-effects test focused on ratios (Appendix III, Table 1), seeking to detect any volatility following the introduction of IFRS in the US. Possible income volatilities were detected through analysis of variance, using an F-test for standard deviation (Snedecor and Cochran, 1983), and more specifically Levene's (1960) test.

H6: Under IFRS, firms listed on US markets tend to exhibit less earnings management

This sixth hypothesis focused on whether adoption of the new standards has eliminated the need for earnings management in the US, as it has in Europe. Objective and reliable information contributes not only to the efficient and cost-effective functioning of the capital market, but also to information symmetry, which in turn helps companies achieve improved performance. Earnings management should be unknown for firms adopting IFRS in the US, as the US legislative environment seems ideal for the new standards. These last two hypotheses might produce interesting results, as most foreign companies preferred to follow IFRS after the SEC's decision, while many more firms wanted to switch to IFRS. I focused on the following tests.

TEST 1: Volatility

The first test of this hypothesis used an analysis of variance (F-test) to detect volatility of change in net profits to total assets (*ΔNP/TA*) and the volatility of change in net profits to the volatility of change in cash flows from operating activities (*ΔNP/ΔOCF*). As the literature links the volatility of a measure with its accuracy, it

was expected that under IFRS firms would exhibit greater volatility in the above measures.

TEST 2: Accruals performance

This second earnings-management test focused on accruals performance and consisted of the following sub-tests.

a) Following a Pearson correlation between discretionary accruals (*DAC*) and operating cash flows (*OCF*) for the year before and after acceptance of IFRS in the US (2007), the research sought to detect any indications of decreased use of accruals. A negative correlation would imply that companies might be increasing their accruals in case of low cash flows, leading to earnings management.

b) In addition to the quantity of accruals highlighted by most studies, the quality of accruals is often used to test combined models (Jeter and Shivakumar, 1999). The next sub-test focused on this quality measure, testing operating cash flows (*OCF*) separately so as to increase the position of estimates. To this end, the following model was estimated, as suggested by Wysocki (2004):

$$\Delta WC_{i,t} = \alpha_0 + \alpha_1 OCF_{i,t} + e_{i,t} \qquad (25)$$

where $\Delta WC_{i,t}$ is the change in working capital scaled by total sales; and $OCF_{i,t}$ is the operating cash flow for firm *i* in fiscal year *t*, scaled by total sales.

A higher R-squared for the model under IFRS compared with that under US GAAP would reflect high earnings quality and lower potential for income smoothing under IFRS. A low R-squared value for all results is attributable to the absence of more independent variables from the model. However, I preferred not to add additional independents, which would have increased the power of R-squared but may have decreased the estimation of the accruals' quality.

c) Finally, in this third accruals sub-test, the next ordinary least squares (OLS) regression was run to examine the relationship between discretionary accruals, profitability, leverage and size ratios.

$$DAC_{i,t} = a_0 + a_1 Profitability_{i,t} + a_2 Leverage_{i,t} + a_3 Size_{i,t} + e_{i,t} \qquad (26)$$

where $DAC_{i,t}$ is discretionary accruals estimated using the cross-sectional Jones (1991) model; other variables are as described in Appendix III, Table 1; and $e_{i,t}$ is the error term.

TEST 3: Small positive profits and large-scale native losses

The third test concentrated on small positive profits (SPP) and large-scale native losses (LNL), as these measures indicate a possible earnings management case.

a) It is a common target for firms with small losses to manage their numbers in order to convert these small accounting losses into small positive profits (SPP) (Burgstahler and Dichev, 1997b; Leuz et al., 2003). For this reason, the following logistic regression model was used:

$$RR_{i,t} = a_0 + a_1\, Size_{i,t} + a_2\, Investment_{i,t} + a_3\, Growth_{i,t} + a_4\, Profitability_{i,t} + a_5\, Liquidity_{i,t} + a_6\, Leverage_{i,t} + a_7\, SPP_{i,t} + e_{i,t} \quad (27)$$

where $RR_{i,t}$ equals 0 for the first examination year and 1 for the second; $SPP_{i,t}$ is a dummy for SPP, equalling 1 if the net profit scaled by total assets is between 0 and 0.01, and 0 in all other cases; for other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term. A negative coefficient of $SPP_{i,t}$ would indicate less earnings management, as it would denote that under IFRS, SPP firms have decreased.

b) The LNL test deals with the time at which large-scale losses are recognised. Although higher-quality standards may provide investors with more timely and accurate information, most firms tend to postpone large accounting losses to future years (Ball et al., 2000). Thus, earlier loss recognition is a top priority for both IFRS and US GAAP. The following logistic regression was run (Lang et al., 2003, 2005), similar to the previous one.

$$RR_{i,t} = a_0 + a_1\, Size_{i,t} + a_2\, Investment_{i,t} + a_3\, Growth_{i,t} + a_4\, Profitability_{i,t} + a_5\, Liquidity_{i,t} + a_6\, Leverage_{i,t} + + a_7\, LNL_{i,t} + e_{i,t} \quad (28)$$

where $RR_{i,t}$ equals 0 for the first examination year and 1 for the second; $LNL_{i,t}$ is a dummy variable indicating loss recognition, taking a value of 1 if net profit scaled by total assets is less than -0.20 and 0 in all the other cases; the remaining independent variables are as defined in the previous equation (27). A positive coefficient of $LNL_{i,t}$ would indicate less earnings management, as it would denote that under IFRS, firms have given more timely notice of large-scale losses.

4.6.3 Cycle III: IFRS and US GAAP under crisis

The last three hypotheses examine the outbreak of the financial crisis in 2008. They provide answers to the third initial set of research questions (Q3). The study

sought to detect whether IFRS and US GAAP protected firms from abnormal sales arising from the outbreak of the crisis, whether the reclassification option under IFRS was an answer to the crisis, and whether IFRS and US GAAP succeeded in regulating shadow banking through their amendments.

H7: The outbreak of the crisis negatively affected stock performance in the banking and insurance sectors in Europe, Australia and the US

In 2008, an international economic crisis started to appear, affecting mainly the financial sector. In every crisis, many events may affect the performance of securities and may be unexpected, as in the bankruptcy of Lehman Brothers (PwC, 2009), which proved a pivotal incident in the crisis that nobody had predicted. Indeed, most banking and insurance companies seemed to have serious balance sheet problems that triggered investors' interest. On the other hand, many insist that, even in these cases, investors had access to internal information and may have engaged in speculation on the stock markets. Therefore, I aimed to examine the market reactions of bank stocks from Europe and the US to this major international event. In other words, I sought to determine whether the crisis resulted in significant abnormal returns in stock markets, and whether this might be attributable to a normal overreaction, or was due to well-planned speculative intentions.

Examining firms' performance under such conditions might also help me to determine the necessary timeframe for companies to recover their stock prices, and any common assumptions that might help me as a market professional to react better to similar future cases, as the effects of the crisis seem to be ongoing. I considered, therefore, that it would be particularly interesting to estimate any abnormal returns of financial companies from Australia, Germany, Greece, the UK and the US during the Lehman Brothers incident, in order to detect the short-term reactions of these markets. Thus, I again used the market model method, as in H2/Test 3. The model proceeded exactly as in Equation 14, but in this case I focused on an estimation window five days before and after the effective date of the event, 15 September 2008 (the date on which Lehman Brothers filed for bankruptcy).[27] Finally, I again used ASX for Australia, DAX for Germany, ASE for Greece, FTSE for the UK, and DJIA and NASDAQ for the US.

[27] http://www.rediff.com/money/2008/sep/16lehman.pdf.

H8: Use of the reclassification option has resulted in financial statement effects, increasing accruals in many cases, but adding market value

To alleviate the effects of the crisis, authorities in Europe allowed deviations in IFRS values. More specifically, the IASB amended individual standards IFRS 7 and IAS 39, permitting banking firms to reclassify some of their assets that had previously been measured at fair value, under restrictive rules and disclosures. These amendments were effective from July 2008. However, as revealed in the literature review, there were cases of prudential ratio violations, and references to complaints of accounting misconduct increased significantly following the outbreak of the credit crisis (Johnson, 2008). In addition, some have even criticised the extremely short notice procedure which was followed, rather than the regular standard-setting process. In contrast, the FASB decided not to suspend fair value accounting for US firms, also affecting the accounting measures of US banks. Exploring this hypothesis provided a good opportunity to compare the different reactions of IFRS and US GAAP to the outbreak of the crisis, and to investigate firms' performance as a result of these modifications.

The next three tests aimed to analyse the extent to which these two boards' different decisions affected the banking sector. The analysis focused on the years 2007–2009, in order to detect the long-term effects of the reclassification option. Furthermore, I focused on companies operating in the financial sector from Australia, Germany, Greece, the UK and the US. However, since the US had many more financial listed firms than the other countries examined, I decided to merge the sample of these countries and compare this new dataset with the US. In this way, I was able to achieve better statistical significance. Finally, to estimate whether a firm used the reclassification option, I focused only on the choice of a company to adopt this amendment, rather than on details of the disclosure.[28]

TEST 1: Financial statement effects of reclassification option

In this first test, I proposed to detect any financial effects following the introduction of the reclassification option. For this, I used the following multinomial logistic regression model:

[28] The reclassification option involved, apart from a firm's option to use it, a decision on how to disclose it, as well as the items it chose to reclassify. As a result, many studies introduce subcategories into this reclassification option.

$$RR_{i,t} = a_0 + a_1\ Size_{\ i,t} + a_2\ Profitability_{i,t} + a_3\ Leverage_{i,t} + e_{i,t} \quad (29)$$

where $RR_{i,t}$ is a dummy variable indicating the country and the reclassification option, equalling 0 for firms that did not reclassify, 1 for reclassified and 2 for US companies; for other variables, see Appendix III, Table 1; $e_{i,t}$ is the error term.

TEST 2: Accruals and reclassification option

The reclassification option will have been more useful if it succeeded in preserving lower discretionary accruals for firms that chose to follow this option. Thus, correlation between accruals and this option is highly important. For this purpose, the second test of this hypothesis was divided into two further sub-tests:

a) Starting from the need to detect any decrease in accruals for reclassified companies, the following logistic regression was performed for year sets 2007–2008 and 2007-2009. A negative $DAC_{i,t}$ value could be a reference.

$$RR_{i,t} = a_0 + a_1\ DAC_{i,t} + a_2\ Size_{i,t} + a_3\ Profitability_{i,t} + a_4\ Leverage_{i,t} + + e_{i,t} \quad (30)$$

where *RRi,t* equals 0 for the first examination year and 1 for the second; *DACi,t* is discretionary accruals estimated using the cross-sectional Jones (1991) model; other variables are as described in Appendix III, Table 1; and *ei,t* is the error term.

b) Moving a step further, I also sought to observe the performance of firms that did not adopt the reclassification option, as well as US firms. For this reason, I focused on the years 2008 and 2009, and again followed the linear regression below, similar to H1/Test 4 (Equation 9):

$$DAC_{i,t} = a_0 + a_1\ DV_{i,t} + a_2\ DV_{i,t}\ Sizei_{\ i,t} + a_3\ DV_{i,t}\ Profitability_{\ i,t} + a_4\ DV_{i,t}\ Leverage_{i,t} + e_{i,t} \quad (31)$$

where $DAC_{i,t}$ is discretionary accruals estimated using the cross-sectional Jones (1991) model. $DV_{i,t}$ is a binary dummy variable, equalling 0 or 1 according to a number of cases: in the first case, $DV_{i,t}$ equals 1 for reclassified companies and 0 for non-reclassified companies; in the second case, $DV_{i,t}$ equals 1 for US companies and 0 for reclassified; and in the last case, $DV_{i,t}$ equals 1 for US firms and 0 for non-reclassified companies. Other variables are described in Appendix III, Table 1; and $e_{i,t}$ is the error term.

TEST 3: Reclassification and abnormal returns

In this last test, the project proposed to detect the market reaction to the announcement of the reclassification option. For this reason, I performed exactly the same methods as adopted in the previous Test 2b (Equation 31), for the same examination years, with identical $DV_{i,t}$ value categorisation. The only difference was that, instead of accruals ($DAC_{i,t}$), I considered firms' annual cumulative abnormal returns ($CAR_{i,t}$) as the dependent value.

H9: Amendments to both IFRS and US GAAP have improved the accuracy of the shadow banking sector

Following the outbreak of the crisis, all responsible authorities tried to enforce a legal framework on the shadow banking sector, and researchers sought to determine key elements in its development. Many blamed shadow banking for its inadequate control mechanisms.[29] For this reason, and to protect the financial system from future anomalies, authorities aimed to tighten accounting regulations relating to shadow banks and instituted regulations to control them. This was their first attempt to regulate this system, and thus they focused on three crucial issues: revenue recognition, leasing and financial instruments.

As a result, the IASB introduced additional improvements to IFRS 7 and IFRS 9, taking effect from 2011 and 2013 respectively.[30] It has already planned the introduction of IFRS 13, dealing with fair value measurement, and may further regulate this sector (Appendix II, Table 6). Similarly, although it has not yet issued final standards in this area, the FASB introduced US GAAP amendments effective from 2011 that aimed to regulate the banking sector (Appendix II, Table 9). Testing this final hypothesis contributes to overall comparison of the two regimes, as it scrutinises whether these improvements have helped regulate this sector. Although it appears that, for the first time, IFRS had a more timely effect than US GAAP, multiple parameters must be taken into consideration. The banking system has

[29] Shadow banking consists of institutions such as investment banks and hedge funds which are not subject to the same regulations as depository institutions such as commercial banks.

[30] In November 2009, the IASB issued IFRS 9 'Financial Instruments', replacing IAS 39 and taking effect from 2013. However, the Board released further amendments to IFRS 9 in 2010 and 2013, and its final form was established in 2014 and will take effect from 2018. Thus, I aimed to examine the effects of IFRS 9 in its pre-2014 format, as it remained available for application to the period on which I was focusing. This might provide useful early indications of its effectiveness (https://www.iasplus.com/en/standards/ias/ias39; https://www.iasplus.com/en-gb/standards/ifrs-en-gb/ifrs9).

additional rules that may affect financial statements, such as the Basel Accord which sets many policies closely related to IFRS, such as deferred tax credits.

Through this hypothesis, I aimed to analyse the performance of the amendments to IFRS 7 and IFRS 9 that took effect from 2011 and 2013 respectively, and to compare these improvements with corresponding US GAAP improvements. For this purpose, I estimated the following tests, concentrating on information asymmetry, value performance and earnings management. The tested years were 2010 versus 2011, and 2012 versus 2013. If accounting regimes performed better in the years 2011 and 2013, then the amendments could be considered successful. Finally, the dataset consisted of firms listed in Australia, Germany, the UK and the US, excluding Greece since its stock market has no shadow banking companies.

TEST 1: Information asymmetry

Information asymmetry models assume that at least one party to a transaction has relevant information whereas the other does not. For this reason, the introduction of amendments to both regimes aimed to provide better quality financial reporting in order to decrease information asymmetry (Leuz and Verrecchia, 2000) for all interested parties in the investment environment. However, as this notion reflects many measures, income volatility and value relevance were used as proxies for information asymmetry.

a) Income volatility

   In this test, I aimed to detect any volatility in accounting figures. For this reason, I performed an F-test for the standard deviation of ratios, similar to the model of H5/Test 2. A high standard deviation would indicate high volatility, and high volatility would indicate low information asymmetry. Thus, the higher the standard deviation, the better the information for investors.

b) Value relevance

   Value relevance is the ability of the information disclosed in financial statements to capture and summarise the firm's value. Increased value relevance leads to higher accuracy, higher-quality accounting amounts, and consequently lower information asymmetry. For this reason, the following OLS regression was performed (Burgstahler and Divchev, 1997a; Ohlson, 1995).

$$P_{i,t} = a_0 + a_1 BVPS_{i,t} + a_2 NPPS_{i,t} + e_{i,t} \qquad (32)$$

where $P_{i,t}$ is the firm's price at the end of the year; $BVPS_{i,t}$ is the firm's book value scaled by the total number of shares; $NPPS_{i,t}$ is the firm's net profit deflated also by the number of shares; and $e_{i,t}$ is the error term.

For this regression, I examined the explanatory power of the regression (R^2), which was expected to be higher after the improvements. Furthermore, as book value and net profit are the main measures of value relevance, meaning that higher book value indicates better accounting quality, it was also expected that after the amendments, these measures would exhibit higher significant positive coefficients (Burgstahler and Divchev, 1997a; Ohlson, 1995).

TEST 2: Impact of firm value

It is believed that markets impact on accounting events (Barth and McNichols, 1994), and that investors react positively to amendments to accounting regimes. This study evaluated investors' reactions to the above improvements in the shadow banking industry, taking into account changes in the actual value of the firm. This value perception was based on Tobin's q assessment, as measured by Daske et al. (2007). The higher the Tobin's q score for a firm, the higher the value of the firm, as it reflects greater investor confidence in the firm's growth potential (Daske et al., 2007). For this reason, based on Elbannan's (2010) model but with slight differences,[31] the following logistic regression model was used:

$$RR_{i,t} = a_0 + a_1 \Delta Tq_{i,t} + a_2 \Delta TA_{i,t} + a_3 LEV_{i,t} + a_4 MV_{i,t} + e_{i,t} \qquad (33)$$

where $RR_{i,t}$ is a dummy variable of the year, with 0 representing the most recent year prior to the amendments (2010 and 2012) and 1 representing the year after (2011 and 2013); $\Delta Tq_{i,t}$ represents the change in Tobin's q scaled by total assets; Tobin's q is calculated as total assets – book value of equity + market value of equity (Daske et al., 2007); $\Delta TA_{i,t}$ is measured as the change in total assets; $LEV_{i,t}$ is measured as total liabilities divided by total stockholders' equity; $MV_{i,t}$ is the natural logarithm of the market value of equity; and $e_{i,t}$ is the error term.

[31] First, I excluded the 'median Tobin's q for an industry' independent variable of Elbannan's model, as in this model I focused only on the shadow banking sector. Secondly, I chose to follow a logistic regression approach rather than a linear regression with a year categorical independent value. For analysis of binary data, logistic regression seems to predominate over all other methods in the social sciences (Allison, 2012). In addition, as I wished to preserve a consistent statistic processing methodology, I chose to follow logistic regression, as in similar previous hypotheses, with two years of comparisons.

A positive $\Delta Tq_{i,t}$ figure would suggest an increase in the market value of the sample firms after the improvements, and a negative change in q would suggest a decrease in firm valuation, meaning that any amendments had been insufficient to earn investors' trust and increase firms' value.

TEST 3: Earnings management

To test earnings management, I focused again on discretionary accruals based on Jones's (1991) model, as performed in H1/Test 2, proceeding to the following three sub-tests.

a) As in H6/Test 2a, a Pearson correlation was performed between *DAC* and *OCF* for the years before and after the improvements to detect any indications of decreasing usage of accruals. A positive correlation might be a reference, as this would mean that managers no longer responded to low cash flows by increasing firms' accruals (Myers and Skinner, 2002; Land and Lang, 2002).
b) Moreover, based on Tendeloo and Vanstraelen's (2005) model, the study aimed to examine accruals performance before and after the amendments, linked with size, profitability and leverage ratio. For this, the following logistic regression was performed:

$$RR_{i,t} = a_0 + \alpha_1 DAC_{i,t} + \alpha_2 Size_{i,t} + a_3 Profitability_{i,t} + a_4 \ Levarege_{i,t} + e_{i,t} \qquad (34)$$

where $RR_{i,t}$ equals 0 for the first examination year (2010, 2012) and 1 for the second (2011, 2013); $DAC_{i,t}$ is the discretionary Jones (1991) model accruals; other variables are as described in Appendix III, Table 1; and $e_{i,t}$ is the error term.
c) Finally, concerning the quality of accruals after the accounting improvements, the following model was used, as in the case of H6/Test 2b:

$$\Delta WC_{i,t} = \alpha_0 + \alpha_1 OCF_{i,t} + e_{i,t} \qquad (35)$$

where $\Delta WC_{i,t}$ is the change in working capital scaled by total sales; $OCF_{i,t}$ is the operating cash flow for firm *i* in fiscal year *t*, scaled by total sales; and $e_{i,t}$ is the error term. A higher R-squared would reflect high earnings quality and lower potential for income smoothing.

4.7 Challenges Concerning the Application of Panel Modelling

The project used already known and successfully applied methods for hypothesis testing and variable assembly. Thus, I faced few challenges during the modelling

activity. However, in many cases, there was a need to transform the models to achieve better results and to suit the dataset. These emerging transformations and adjustments, although considered crucial for the significance of the results, nevertheless proved challenging, difficult and time-consuming. An indicative example was the case of the first test of the first hypothesis, postulating that the method of calculation of FFS companies needed to change. A similar case was the Jones accruals calculation model (H1/Test 2), where I decided to follow a longitudinal approach rather than the cross-sectional study that I had initially planned. This required additional time to obtain appropriate data and find the most suitable format. Above all, to familiarise myself with the new procedures, I had to obtain a new statistical program, along with the necessary training. Updated knowledge and highly intensive preparation were necessary to obtain meaningful and accurate results in this case. In contrast, in H4 I had planned a longitudinal analysis, but instead, owing to sample restrictions, I adopted a cross-sectional analysis. Overall, time constraints and the difficulty of obtaining data were the most challenging issues for the modelling activity. However, in all cases, I managed to determine the strengths and weaknesses of possible alternative methods, and thus formulated appropriate models, always taking statistical accuracy into account.

4.8 Ethical Considerations

Research ethics has always been critical in studies like this. Thus, all responsible parties, including organisations and universities, set distinct rules and boundaries on ethical considerations. In this context, I required careful and predetermined ethical steps to maximise the quality of information and minimise ethical risks. The first step was approval of my research proposal by Middlesex University and close cooperation with my advisors so as to meet the university's ethical guidelines. The next steps involved the planning and strategy stages of research, including data access, collection and analysis, as they might affect participants, society and professional relationships (Gillespie, 1994).

There were no individual participants in my study. Thus, I focused only on the fair treatment of companies' data, while societal risks were involved in the impact of the knowledge produced from the project's results. All hypotheses and methods were based on my own knowledge as distilled from the literature and ideas emerging from my working experience. Furthermore, the research was self-funded, with no sponsors,

and I work neither as an accountant nor an employee of any of the companies examined, nor have I ever audited or officially analysed them or any of their rivals. Thus, I had no possibility of using any internal/privileged information, so I also had no need to fear any conflict of interest or confidentiality violation. Therefore, I approached this study with professionalism, accuracy, objectivity and no ethical bias. Overall, as there was no personal interference in any ethical issues, and since the literature search and theoretical review presented no obstacle because all the articles had been published, I inevitably focused on data collection and analysis techniques. I focused on three issues.

1. Ethical issues during data collection

The data collection stage is associated with several ethical issues that must be taken into account in any study. This is very important, because without objectively collected data, the final analysis and report will be questioned. In my case, gaining and maintaining access to the information required was easy. I did not explore or gather any data from interviews, questionnaires or internet forums, but focused on secondary numerical data that needed no special permission for access. Every listed firm is obliged to publish its accounting figures, and these can be accessed and analysed by anyone, eliminating any confidentiality issues. Furthermore, as many official databases and resources offer access to statistical and accounting figures, I encountered no difficulties concerning the reliability of any data. As explained in Section 4.1.2, I used databases and official financial sources for data collection. Maintaining objectivity and unimpaired accuracy during the data collection stage was also important, so I did not partially exclude any company, exercising subjective selectivity in my sample. Overall, all data were collected accurately and fully, while in cases that needed permission for access and publication, I obtained official authorisation (Appendix II, Table 9).

2. Ethical issues associated with data processing and storage

Data processing may also raise ethical issues. For this reason, and in order to avoid partial processing in favour of one country's firms, the research proceeded with careful clarification of the data. I examined corresponding variables from each country, and performed the same statistical procedures for the same years for each country. The large amount of data and differences in the size of the economies and firms compared might also have involved ethical considerations, regarding both the process and the results, but I managed to apply variables that would balance these

differences out. Furthermore, the research estimated all ratios in each firm's official currency, enhancing the objectivity of the data process. As data procedures may also be affected by information that is difficult to elicit, such as managerial motives, in this research no data were processed that might be controversial or for which the real managerial intentions behind their decisions had not been made clear. Finally, concerning data storage,[32] consistent with my undertaking not to use any ethically questionable procedures, and although the study contains no individuals' personal data, firms' data and other information obtained by permission were stored and moved securely.

3. Ethical issues relating to analysis and reporting

Maintaining objectivity is also very important at this stage, as any lack of objectivity will distort conclusions and recommendations. Although many suggest that it is difficult to sustain objectivity (Wells, 1994), I managed to preserve the accuracy of the results and methods used, not only through the statistical precision of analysis, as already explained, but also during the hypothesis tests. For this reason, I identified several practical issues. First, there were no cases of misrepresentation or misinterpretation of results. I did not engage in any selection of data input or output, nor have I misrepresented the models' statistical accuracy (Zikmund, 2000). Statistical and interpretational integrity also include the presentation of unexpected results. The findings were not adjusted to fit expectations, nor to suit the needs of specific firms or favour any of the accounting regimes examined.

In addition, to enhance the impartiality of results and understand, compare and analyse the final outcomes, I have provided descriptive statistics of all values and measures used. Therefore, I have eliminated any hidden information, and there is no dissemination of intentionally false statistics. For example, in the first test of the first hypothesis (Section 4.6.1), the result for Greece was impressive, being the only country that has managed to decrease its FFS firms every year. In focusing on this impressive and accurate fact, it might have been preferable to display only this outcome. Instead, consistent with the most unbiased interpretation of the results, this thesis compared the descriptive characteristics of all countries, revealing that Greece had the most cases of FFS firms before IFRS implementation, meaning that even after their elimination it still had the most FFS firms. In a similar vein, there was no

[32] The European Union (Directive 95/46/EC) imposes strict regulations on the protection of individuals in processing, storing and moving personal data.

intention to skew any results against or in favour of any country. This confirms the broad and multidimensional interpretation and presentation of the results.

Furthermore, most of my models were based on cross-sectional analysis, enhancing firms' confidentiality. Even in cases where I performed a firm-by-firm examination (H1/Test 2), I maintained the same ethical standards. The results are analysed and reported with anonymity (McNamara, 1994). The study did not aim to cause any harm to firms' reputation as a result of their potential weakness in particular tests. Thus, aiming not to risk targeting any firm for any reason, I exercised great care to avoid such situations. Companies cannot be recognised or identified as I have not revealed any of their characteristics. In addition, I intend to create a database of accounting behaviour that will lead to recommendations and eliminate misleading behaviour in the future, and addressing individual companies and singling out their performance is far from my role. The research design preserves the accounting community from being victimised by my study and specific countries and firms from being targeted. Overall, my key concern has always been to maintain a high level of ethical behaviour and to ensure that I cause no harm to any company, authority or individual (Easterby-Smith et al., 2008). For this reason, on completion of this research, a full copy of the findings was shown to my advisors. Ultimately, it is impossible to manage the results of research focusing on firms' earnings management, but it is possible to guarantee that high standards of ethical and transparent procedures have been followed.

4.9 Summary

This chapter has described in detail the methods used to gather and process data, as well as the selection and preparation of variables. This was the last step before examining the results. Therefore, I tried to maintain high standards of data to make my models significant and scientifically accepted. I have also explained the rationale for the hypotheses and the models, as distilled from the action research cycles, as well as how these responded to my final research questions, as developed through my literature review and working experience. I was already familiar with most of the tests used, enhancing the precision of the analysis, since statistical models may be affected by small discrepancies in the process or data sample. Therefore, I focused on appropriate implementation of the procedures, leading to interesting and precise results and outcomes, as described in the following chapters.

CHAPTER 5: PROJECT RESULTS AND ANALYSIS

5.0 Introduction

In this chapter, I interpret, discuss and analyse in detail the empirical results obtained. In the first section, I explain the descriptive statistics of the analysis. The main characteristics of the firms and countries examined are outlined, and the means of the values used in the main statistical analysis are compared. Descriptive statistics are presented not only by year, but also by country, contributing to better readability. The second section moves on to the actual results, which are summarised according to the thematic task of each hypothesis. Thus, the results are presented in three broad sections closely related to the framework of hypotheses from the previous chapter, namely IFRS versus Old GAAP, IFRS in the US, and IFRS versus US GAAP against the backdrop of the crisis. Since the volume of statistical results for each hypothesis is huge, I have chosen to present all the detailed findings in Tables in Appendix III. All critical measures, as described in Chapter 4, are highlighted and explained in detail during the presentation of the results. Table 3 provides concise information on the outcomes.

Table 3: Overall outcomes in brief

Null Hypothesis	Result	Outcomes
Descriptive statistics	Interesting 'demographic' details of the dataset	No need for further action. I compare and describe ratios and measures by country and/or by year.
H1: The introduction of IFRS has decreased falsified financial statements and improved auditing quality.	Accepted with notes	Additional attention needed for IFRS: *Insist more on FFS cases under crisis, *Reprofile accruals performance, *Focus more on specific individual standards, *Reconsider auditors' functional frame.
H2: Under IFRS firms demonstrate a decrease in speculative insider trading cases.	Rejected	*Increased trading value and number of insiders for all countries, *Need to proceed to additional regulations and mechanisms apart from restrict disclosure requirements, *Close observation of insider cases, *Improvement of related individual standards, *Link between insider trading accruals and abnormal returns.
H3: Under IFRS firms exhibit lower cost of equity, without resorting to earnings management procedures.	Accepted	Under IFRS, there is a decrease in firms' cost of capital, without any speculative procedures. However, there are always cases that need special attention.
H4: The SEC's decision to allow IFRS for foreign firms has increased the proportion of the converging process.	Accepted	FASB and IASB may cooperate more closely in order not to postpone again their convergence plan.

H5: Financial statement effects under IFRS for firms that used to follow US GAAP.	Accepted	Typical procedure effects with increased volatility but with better performance for IFRS compared to other countries where they have been introduced. It seems that the US environment is appropriate for IFRS. No further action is required
H6: Under IFRS, firms listed in US markets tend to exhibit less earnings management.	Accepted	*Less earnings management in the first IFRS adoption year, *They kept a high level of accurate accounting interpretation, *Decrease of SPP and increase of LNL firms, *Special attention needed for the next crisis year.
H7: The outbreak of the crisis has negatively affected stock performance in the banking and insurance sector in Europe, Australia and the US.	Accepted	*High abnormal returns for all countries, *More volatility for US markets, *Possible considerations for speculative procedures before the event, *Quick recovery for all countries.
H8: The use of the reclassification option has resulted in financial statement effects, increasing accruals in many cases, but adding market value	Accepted	*Successful decision of IFRS Board, *FASB should have followed this decision for US firms, *Special attention to leveraged firms, *Need to consider similar tests on a long-term basis.
H9: The amendments of both IFRS and US GAAP, have improved the accuracy of the shadow banking sector.	Rejected	*No indications that all amendments of both regimes increased accuracy of shadow banking sector, *Results of high importance for surmounting the crisis, *More measures needed from IFRS, *US GAAP may rush for their final improvements in this field, *Close cooperation of all authorities.

5.1 Overview of the sample descriptive statistics

Appendix III, Table 2 reports the descriptive statistics of the sample. These provide a better understanding of the particularity of the dataset, and will assist in explaining the main analysis and results.

5.1.1 IFRS versus old GAAP

2004–2006 (Panel A)

Panel A presents statistics for the IFRS adoption period. The most impressive finding is that under IFRS, all countries increased their insider trading value, and in every case, this increase was consecutive also for 2006 (ITV). This can be attributed to the restrictive insider trading rules under IFRS, or even to insiders' trust as a result of IFRS. Concerning the remaining variables, in Australia (Panel A1), the results indicate that during the first year of adoption, firms had lower size measures (SALETAS, RESSFU) and leverage ratios (DEBT), but higher liquidity measures, except for the CASH ratio which was lower. Profitability measures do not give a clear

picture. In every case they remained negative and operating profits were lower under IFRS in the first year (OPM), while investments increased (DIVYI, HOLTA).

Panel A2 presents descriptive statistics for German firms before and after the adoption of IFRS. The results for falsified firms (FFS) are encouraging as they show signs of decreases in both 2005 and 2006. German companies, like Australian ones, exhibit lower size measures (SALESHA, SALETAS). However, a potential cause for concern, as it is potentially unfavourable to all other countries, is that Germany had lower liquidity measures (CASH, QUI). Otherwise, German firms exhibit greater investment prospects (PE), profitability (EPS) and leverage (DEBT, INTCOV). It seems, therefore, that negative results did not deprive German companies of borrowing opportunities, promoting their increased profitability and accounting accuracy as collateral benefits.

The same motive applies to Greece, where the number of FFS cases reduced under IFRS and which is the first country with higher size ratios (RESTAS, RESSFU). The results also improved for growth (MVBV) and liquidity (CUR, QUI) measures. The fair value orientation seems not to have had any adverse effects on the market value of Greek firms, suggesting that IFRS helped smaller economies to become more competitive. On the other hand, more steps need to be taken by Greek companies, as investment (DIVCOV, HOLTA), profitability (ROSC, ROCE) and leverage (INTCOV, DEBTE) ratios decreased. New accounting methods may always influence net profit results (Perramon and Amat, 2006), while lack of familiarity with new procedures and higher transaction costs may make smaller economies more vulnerable to these measures.

Finally, the UK presents a clearer picture concerning IFRS performance. Indeed, UK companies increased their sales (SALESHA) and managed to perform better on almost all the examined measures. Taking advantage of this more objective global accounting system and its external orientation, UK firms increased their profitability (OPM, EPS), leverage (ETL, INTCOV) and liquidity (CUR, WCR). Similarities between the UK's old GAAP and IFRS seem to have given UK firms an advantage in the transition process. Overall, the new accounting methods influenced many measures in their first implementation year, probably owing to their fair value orientation (Perramon and Amat, 2006).

Concerning the post-adoption period (2006), in most cases the results are insignificant, with no major differences in most values. In other words, during 2006,

firms from all countries maintained their performance. This may indicate that IFRS provided a more stable business environment, absorbing any disturbances in the initial adoption period. However, this does not seem to have been preserved under the crisis, as analysed in the next paragraph, while differences in changes to the variables between countries are notable, as described below.

2007–2009 (Panel B)

Panel B presents descriptive statistics for the period 2007–2009. This period was characterised by turmoil and unprecedented conditions for IFRS. The results reflect these difficult circumstances, as the values for all countries were lower for 2008 than for 2007. Noteworthy exceptions were Australia's accruals performance (Panel B1) in 2008, which decreased, although the following year they unexpectedly increased, and there are some indications that Australian companies managed to increase their leverage ratios (DEBT, TLSFU) despite the crisis. These negative outcomes were not sustained for long, as already in the next year, there are indications that the environment improved significantly. In this respect, Australia managed to balance its size ratios (SALESHA), improve its growth ratios (MVBV) even more than in the year before the crisis, and increase its liquidity (CFSH, WCR) and leverage (ETL, IGEAR).

On the other hand, Germany (Panel B2) succeeded in recovering only with regard to its cost of capital (COC). It appears, therefore, that although investors trusted German firms, all other measures decreased further a year after the outbreak of the crisis. Similarly, measurements for Greece (Panel B3) did not improve. Indeed, the results indicate that size (RESSFU), investment (PE) and leverage (TLSFU, DEBTE) ratios decreased further, while the most worrying factor is the increase in FFS firms. However, the cost of equity seems to have decreased (COC), and there are signs that profitability (OPM) was higher, but the most promising outcome was the increase in growth ratio (MVBV). On the other hand, the UK (Panel B4) again performed best after the crisis, and indeed was close to fully recovering from the effects of the crisis. The results indicate that all of its ratios increased, while its cost of equity (COC) decreased. However, the huge increase in the number of FFS firms raises questions about this positive performance. Overall, all countries seemed to handle the crisis effectively, but there are obvious signs that more actions were necessary.

Country-level comparison (Panel C)

Comparisons between the countries' descriptive statistics (Panel C) are equally important. In this respect, the results reveal interesting information about the performance of these countries over the entire period. Once again, there are signs that smaller economies performed better under IFRS (Armstrong et al., 2007). For example, Greece exhibited better cost of equity (COC) and growth (MVBV) measures. Taking advantage of the accuracy of IFRS and the safety of participating in the EU, Greece over-performed. Although its firms had the smallest mean of Big 4 auditors and it exhibited the highest mean of FFS during this period, these factors did not prevent it from exhibiting better results than the worst-performing country on each measure. With regard to the other countries examined, there was a clear ascendancy of Germany in terms of size measures, followed by the UK and Australia. Germany and the UK also had higher profitability (EPS), while Australian companies preferred to keep high retained earnings (PLOWB) and, in conjunction with higher leverage (DEBT, ETL), also maintained high liquidity (CUR, QUI). Overall, all countries maintained their characteristics during the difficult conditions of this period.

5.1.2 IFRS versus US GAAP

The SEC's decision to allow non-US firms to publish their accounting figures using IFRS was highly important. The descriptive statistics (Panel D) reflect that under IFRS, although companies' size ratios (SALESHA) decreased, they exhibited better investment (DIVSH), growth (MVBV), profitability (EPS), liquidity (CUR, QUI) and leverage (DEBT) ratios. However, 2008 was a crucial year for global stock markets because the crisis effects started to be reflected in firms' balance sheets. Thus, the results give some first indications that companies did not succeed in maintaining their previous performance. Indeed, under the second year of IFRS adoption, they show a decrease in all the above measures. Since this outcome is a result of the difficult global environment, the statistics in Panel E are particularly interesting.

Descriptive statistics for the financial sector under IFRS (Panel E1) and under US GAAP (Panel E2) reflect early signs that, during the crisis, neither of the accounting regimes managed to prevent a decrease in the ratios. It appears, therefore, that under crisis conditions, size, profitability and leverage ratios reduced in Australia, Germany, Greece, the UK and the US. The results in the next year for both regimes were

similar, but with indications of slight improvements. After the first shock, companies' size measures (SALESHA for IFRS, RESTAS for US GAAP) increased, with cases of better leverage (DEBT for both), but their profitability did not increase. Based on these first indications, IFRS and US GAAP showed common reactions on key measures during the crisis.

Finally, as most commentators considered that in order to prevent such situations in the future, it was essential to regulate the shadow banking sector, both regimes implemented drastic amendments for this purpose. The results (Panel F) indicate that the first set of improvements (2010–2011) caused contradictory outcomes for IFRS firms, as there is no clear picture on ratio effects, apart from profitability and leverage which were lower. On the other hand, under US GAAP for the same period, all firms' accounting measurements decreased, while firms' value (Tobin's variable) decreased under both standards. Nevertheless, statistics concerning the second set of improvements (2012–2013) are more encouraging, as companies displayed improved ratios. Once again, the two standards seemed to perform similarly, as both IFRS and US GAAP firms increased their size, investment, growth and leverage ratios. However, US GAAP adopters overperformed on profitability and liquidity measures, compared with IFRS firms which did not manage to follow suit. Overall, the results indicate that the two regimes performed similarly.

5.2 Results of Cycle 1: IFRS versus Old GAAP versus IFRS Amendments

5.2.1 Results for Hypothesis 1

TEST 1: Falsified financial statements (FFS) and IFRS

Recent debates continue to focus on whether IFRS has managed to eliminate cases of falsified statements. The results of the first test reveal that under the first two years of IFRS adoption, both Australia and Germany eliminated such phenomena (Appendix III, Table 3/Panel A), indicating that IFRS did indeed succeed in reducing FFS cases for Australian and German firms compared with previous GAAP. Nevertheless, during the latter stages of the crisis, FFS performance deteriorated for these countries, as the number of cases increased. It seems, therefore, that amendments to IFRS did not cause appropriate reactions during the crisis. This supports the critical opinion of those who consider that under old GAAP, firms would have performed better. This may also be reinforced by the results for the UK, where the results show an increase in the FFS measure for every examined year (Panel A4).

In contrast, Greece (Panel A3) performed best among all the countries examined, reducing its FFS cases every year, even during the crisis, compared with old GAAP. This unexpected performance is important; however, until 2009, Greece had the highest mean of FFS incidents detected (Table 2, Panel C).

Additional tests were run in order to identify characteristics of firms with falsified statements. Detailed information is provided in Appendix III, Table 3/Panel B, while Table 4 below shows overall relationships between FFS and the ratios.

Table 4: Relationships between FFS and ratios

	Australia						Germany					
Year	**Size**	**Inves.**	**Growth**	**Prof.**	**Liq.**	**Lev.**	**Size**	**Inves.**	**Growth**	**Prof.**	**Liq.**	**Lev.**
2004	-	+	0	-	-	+	-	0	0	-	-	-
2005	-	-	0	-	-	+	0	0	0	+	+	+
2006	-	0	0	-	-	+	-	0	0	+	-	-
2007	-	0	0	-	-	-	-	0	0	-	+	+
2008	-	0	0	-	-	-	+	0	0	-	-	-
2009	-	-	0	-	-	+	+	-	0	-	-	-
	Greece						**UK**					
Year	**Size**	**Inves.**	**Growth**	**Prof.**	**Liq.**	**Lev.**	**Size**	**Inves.**	**Growth**	**Prof.**	**Liq.**	**Lev.**
2004	-	0	0	-	-	-	-	0	0	-	0	-
2005	-	-	-	0	-	-	+	0	0	-	+	-
2006	-	+	-	0	-	+	-	0	+	-	0	-
2007	0	0	0	0	-	+	-	0	0	-	-	-
2008	-	+	-	-	-	-	-	0	0	-	-	-
2009	-	0	0	-	-	-	-	-	0	-	-	-
(-) stands for a negative relationship, (+) for apositive relationship and (0) for no relationship												

The results reveal that from 2004 to 2009, Australian FFS firms displayed negative coefficients with regard to size (SALESHA), profitability (EPS) and liquidity (CUR, CFM) ratios. This indicates that under both old national GAAP and IFRS, even during the crisis, large Australian companies with high profitability and liquidity did not engage in FFS. However, the leverage ratios are higher for all years except for the period 2007–2008, indicating that firms with high leverage tended to falsify their statements, and that IFRS did not succeed in alleviating this phenomenon. Germany, on the other hand, seems to exhibit the most turbulent results. In 2004, under national GAAP, there were decreases in all ratios for FFS firms, namely size (SALESHA), profitability (EPS), liquidity (CASH) and leverage (CLSFU), whereas

during IFRS implementation there were examples of positive correlations between these ratios and FFS firms. The most indicative case is increases in the size measure (RESTAS) in 2008 and 2009, meaning that during the crisis, even big companies engaged in falsified statements in Germany.

With regard to Greece and the UK, the results show that under both old GAAP and IFRS, FFS firms had lower size, profitability, liquidity and leverage ratios. The only exception for Greece was in 2006 and 2007, when firms with high leverage ratios (TLSFU, CGEAR) produced inaccurate statements; and for the UK, in 2005 even big companies (SALESHA) resorted to fraudulent reports, perhaps seeking to overcome the effects of the IFRS transition process. Overall, the results indicate that although IFRS adoption resulted in a decrease in FFS in some cases, it did not succeed in improving the qualitative characteristics of firms that took such action. Thus, under both old GAAP and IFRS, smaller firms with low profitability and liquidity continued to be more vulnerable to fraudulent statements.

TEST 2: Longitudinal accruals analysis

Firms that engage in FFS aim to alter their financial reports in order to mislead with regard to their financial appearance and performance. Apart from artificial increases or decreases in revenues and earnings, this may involve using discretionary accruals. My Level 1 model reveals interesting results concerning the accruals performance of individual firms over time (Figure 3). Figure 3 depicts firm-by-firm growth measures for accruals. Only significant results (not tabled) are displayed in order to enable their interpretation. The most interesting picture is of Australia, which displayed the most volatile measures and seems to have used accruals during crucial periods. Similarly, UK firms also seem to have engaged in accruals techniques in difficult situations, such as IFRS introduction and during the crisis. In addition, Germany shows signs of accruals application mainly during the crisis, while for Greece there is a smooth curve with extreme cases of deviation. However, the main aim of this test was to determine whether a firm that applied accruals assistance in one year would find it easier to use such procedures subsequently.

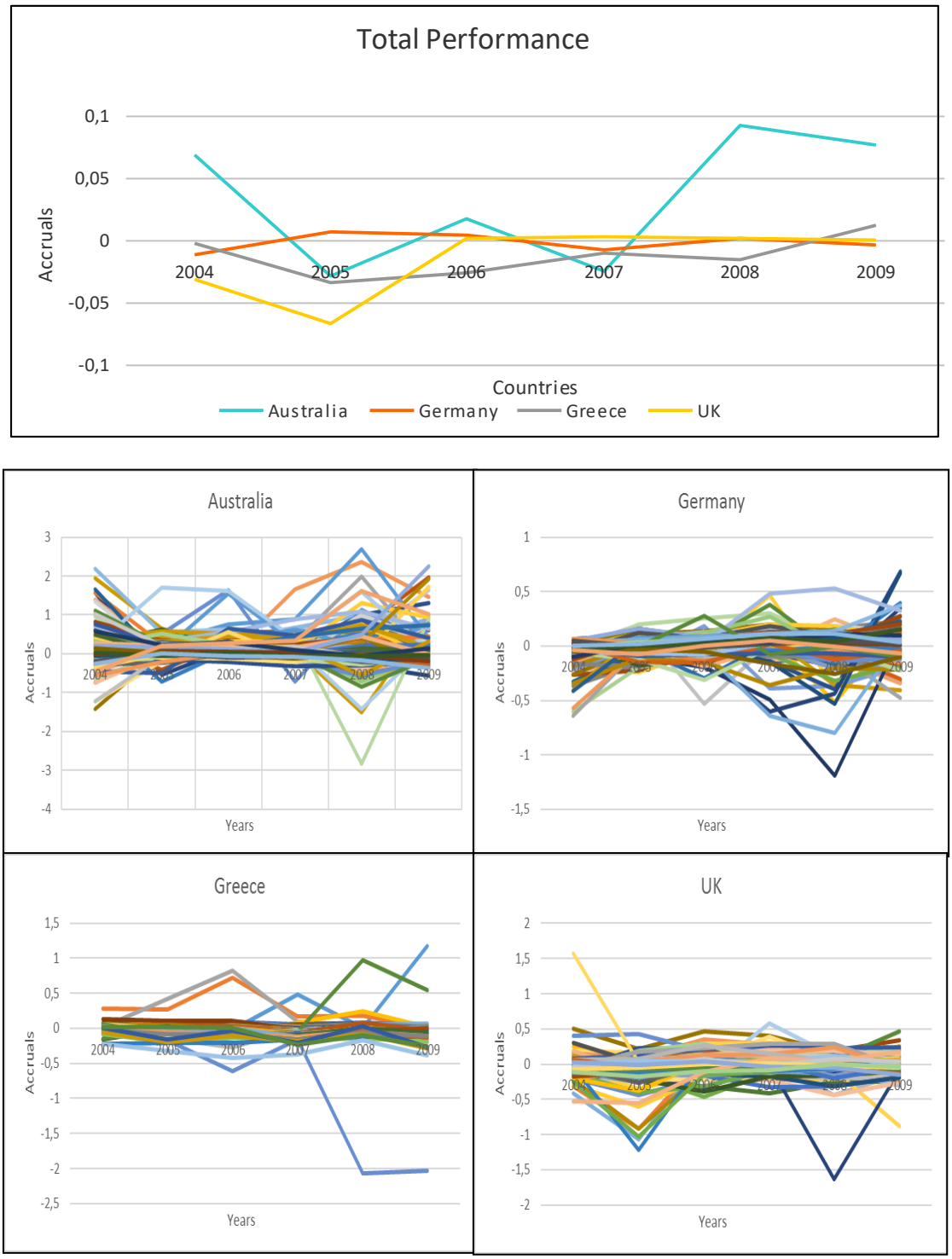


Figure 3: Accruals performance over the examined years

The results reveal that this was not the case (Table 5).

Table 5: Accruals performance

Characteristics	Australia	Germany	Greece	UK
Initial sample	456	404	205	297
Sig. results	285	324	133	246
%	*62,50%*	*80,20%*	*64,88%*	*82,83%*
2004–2006	*Cases*			
Companies with increased accruals	196	197	71	180
%	*68,77%*	*60,80%*	*53,38%*	*73,17%*
Companies with decreased accruals	89	127	62	66
%	*31,23%*	*39,20%*	*46,62%*	*26,83%*
2007-2009	*Cases*			
Companies with increased accruals	79	114	47	132
%	*27,72%*	*35,19%*	*35,34%*	*53,66%*
Companies with decreased accruals	206	210	86	114
%	*72,28%*	*64,81%*	*64,66%*	*46,34%*
Longitudinal Analysis	*Cases*			
Companies that preserved increased accruals	42	65	28	94
%	*14,74%*	*20,06%*	*21,05%*	*38,21%*
Companies that preserved decreased accruals	52	78	52	28
%	*18,25%*	*24,07%*	*39,10%*	*11,38%*
From increased to decreased accruals	154	132	19	86
%	*54,04%*	*40,74%*	*14,29%*	*34,96%*
From decreased to increased accruals	37	49	34	38
%	*12,98%*	*15,12%*	*25,56%*	*15,45%*

The general outcomes indicate that firms in some countries used more accruals to overcome the transaction effects than to deal with crisis phenomena, those in other countries increased their accruals during the crisis, and many did so in both situations. Accruals increased for the period 2004–2006 and decreased from 2007 to 2009 (Table 5), but this does not indicate that firms exhibited less accruals in 2008 than, for example, in 2005. This performance can be determined only from the descriptive statistics (Appendix III, Table 2) but is beyond the purpose of this test, the sole aim of which was to detect the trend in accruals for each firm for these two periods. Indeed, in the cases examined, longitudinal analysis reveals that more than half of companies in Australia that applied earnings management during the adoption period did not use accruals during the crisis. Germany and the UK exhibited similar performance, indicating that firms that attempt earnings managements once will not necessarily use these methods forever, but that every such case is particular and requires further analysis. Equally interesting is the indication that fewer than 16 per cent of firms in countries that had decreased accruals during the adoption period increased their use during the crisis. Thus, the results are encouraging, as most firms that previously used

misstatement techniques tended to stop doing so, and companies that had kept their accruals low tended not to increase them.

The results of the Level 2 multilevel analysis (Appendix III, Table 4) confirm this reflection. Unfortunately, the estimates of fixed effects (Panel A) exhibit a positive relationship between time and accruals for Australian FFS firms, indicating that they tended to increase their accruals every year. This result may explain their volatility in the Level 1 test. On the other hand, there is a significant negative relationship between time and accruals for FFS firms in all European countries. This suggests that, year on year, FFS firms tended to decrease their accruals in Europe. This would be a beneficial outcome for Europe were it not for the following issues. First, the increase in FFS firms for Germany and the UK, determined in the previous Test 1, means that firms may have focused on methods of earnings management other than accruals. Second, there is evidence of a significant positive interaction between time and non-FFS firms, indicating that in every year, non-FFS firms in Germany and the UK tended to increase their accruals. Thus, there was an increased likelihood that these firms would become FFS firms, and in Germany this started to appear, as Panel B indicates that, for the first time, non-FFS German firms had a higher mean of accruals than FFS firms (there is a negative difference between them).

Overall, this test overturns the general estimations for accruals, leading to the conclusion that, when a firm has high accruals, there is high potential for it to produce falsified statements; but this does not mean that if a firm has falsified statements, it necessarily uses accruals. At the same time, if a firm uses earnings management once, there is high possibility that it will not do so again in similar situations.

TEST 3: Individual standards

The third test (Table 5) aimed to shed more light on discretionary accruals, focusing on individual standards of IFRS that might affect them. For Australia, the results indicate that, during the first year of IFRS implementation, IAS 12, 16 and 36 had a negative effect on accruals, meaning that they led to the elimination of accruals by Australian firms (Panel A), and in the case of IAS 12 the outcome was impressive. Indeed, this individual standard positively affected more than 66 per cent of the companies examined. However, this performance did not last long. During the ensuing years, the effects of IAS 16 and 36 became negative, while IAS 12 also contributed to an increase in accruals during the crisis. On the other hand, apart from

the initial and crisis years, cash flow statements (IAS 7) seemed not to be a preferred tool for companies to increase earnings management. Only IAS 32–39 resulted in decreased accruals during the crisis, indicating that the amendments to these standards that took effect in 2008–2009 were fully effective for Australian firms.

Similarly, for the first two years of IFRS implementation, there was an impressive positive effect of individual standards for Germany (Panel B), as most of them (IAS 7, 12, 16, 23, 33 and 38) contributed to the elimination of accruals. This corresponds entirely with the result of Test 1, which showed a decrease in FFS firms during this period. Nevertheless, in 2007, a year characterised by early manifestations of crisis effects, there are indications that some of the previous standards did not succeed so well. Indeed, the average material impact of IAS 7, 23 and 38 was positive in relation to accruals, while improvements to IAS 32–39, which were effective in Australia, did not seem to have the same effect for Germany during the crisis. However, the most encouraging fact is that, under crisis conditions, German firms did not use IAS 33 (EPS) to improve their financials. Since many have expressed concern that IAS 18 and IAS 33 were the first individual standards used to increase accruals, it is highly important that Germany was the only country examined that did not apply this option.

Proceeding to the results for Greece (Panel C), during the first implementation year and during the crisis, the average impact on accruals of most individual standards was positive, while in all other years most (IAS 12, 16 and 18) had negative effects. As in Australia, IFRS improvements to IAS32–39 were successful. Finally, the UK (Panel D) exhibited an impressive first year of IFRS implementation, using the least possible individual standards to increase accruals, but its performance over the following years declined. The year 2008 was the peak of this achievement, where only two individual standards (IAS 16 and 36) contributed to the decrease in accruals. Similarly to Germany, in the UK the improvements to IAS 32–39 had no positive effects.

Overall, the results indicate that once again each country performed differently, although the effects on European countries were similar to Australia. For example, IAS 16 and 33, which for most years had a positive impact on accruals in Australia, had the opposite effect for all other countries. The only individual standards showing a common reaction are IAS 12 and IAS 32–39, which made negative and positive contributions respectively. Under such circumstances, IAS 12 indicates that low taxation reduces earnings management, while the fact that, in all countries, IAS 32–39

were positively related to accruals may indicate that the IFRS board should introduce further amendments. Thus, as proved by these results, and considering the indications of the previous Test 2, it is crucial for investors and authorities to have a clear picture of each separate firm's and standard's performance.

TEST 4: Auditors' size and quality of financial statements

Since its introduction in 1992, statutory auditing has expanded (Leventis et al., 2005), making forensic accounting necessary for listed companies. However, the effectiveness of auditing has been constantly questioned (Leventis and Caramanis, 2005), especially under IFRS where expectations seem to be higher. Previous studies find that companies that select Big 4 auditors have less scope for earnings management procedures, although the quality difference due to auditors' size attenuates in countries with stronger investor protection (Leuz et al., 2003; Burgstahler et al., 2004). Following this rule, Australia, Germany and the UK should have overperformed compared with Greece. However, in my analysis, the findings (Appendix III, Table 6/Panel A) reveal a more complicated situation. Indeed, Australian firms audited by Big 4 companies displayed a positive relationship with accruals for all years of IFRS adoption except 2006 (DV value).

The outcome of this test is also revealing about the characteristics of firms that employed such practices. More specifically, there is a positive relationship between accruals and size ratios (SALETAS) from 2005 to 2007, suggesting that larger firms may be inclined to use earnings management in order to retain the security of a Big 4 auditor. However, this trend ceased during the crisis (LNMV). Australian firms also displayed a positive association between accruals and profitability ratios (OPM, EPS), proving that highly profitable firms may have employed high accruals. The first encouraging results are indicated by the correspondence between accruals and leverage, which was significantly negative (DEBTE) for most years. Thus, highly leveraged firms audited by Big 4 companies did not use high accruals in order to overcome debt issues.

Furthermore, the results reveal that German firms with Big 4 auditors had a negative accruals correlation under IFRS, except for 2006 and 2008. Although this performance may be justifiable under crisis conditions, during 2006 companies seem to have taken advantage of the elastic regulations of the first implementation year in order to gain competitive advantage. Similarly to Australia, German firms exhibited a

positive relationship between accruals, size (SALETAS, LNMV) and leverage (DSFU, DEBT, IGEAR) measurements for all years. This indicates that Big 4 auditors did not prevent large German companies with high leverage ratios from using high accruals.

With regard to profitability, during the crisis there was a negative relationship, meaning that companies with low profitability seemed to engage in earnings management in order to improve their financial figures. Moreover, there appears to have been a negative correlation between Greek and UK firms with Big 4 auditors and accruals, except during the crisis period. They exhibited similar results in relation to size ratios as the aforementioned countries. Concerning the other ratios, UK firms exhibited a negative correlation between accruals and profitability (NPM), while Greece showed no clear trend in performance for these ratios throughout the examined years. Finally, another striking result is that under old GAAP, all countries except Germany had a negative correlation with accruals, meaning that firms with Big 4 auditors appeared to engage in fewer earnings management cases.

In addition, as already mentioned, apart from auditors' size, recent debates focus on their rotation. Most people consider that a more rapid change procedure should be introduced for auditors, as in the UK, but many oppose this on the grounds of increased cost and potentially disruptive effects. The results (Appendix III, Table 6/Panel B) in this case are revealing. Indeed, the UK authorities might feel justified, as UK firms that changed their auditors decreased their accruals under IFRS. In Germany as well, most firms that rotated auditors exhibited negative accruals. Greece did not display significant results as few firms made such changes, while Australia displayed a negative correlation only for the years 2006 and 2009. Concerning additional characteristics, in Australia there was a negative correspondence between accruals and profitability (NPM) and a positive correspondence with leverage (DEBT), indicating that firms with low profitability and/or high leverage took advantage of this change in order to increase their accruals. The results for the remaining ratios were similar, with the exception of the UK, which exhibited a negative relationship between leverage and accruals for most years (DEBT). This indicates that in every case of change, there was a high possibility that the new auditors would not use earnings management techniques.

Overall, this hypothesis sought to examine a crucial concept relating to IFRS implementation during these years. FFS is a complicated notion that relates to many

aspects of IFRS performance. In order to determine whether these aspects had improved, the study combined a number of parameters, as expressed in the tests performed. The results indicate that IFRS did indeed improve the qualitative characteristics of FFS cases and the quality of smaller auditors. As IFRS seems to have improved financial statements, H1 can be accepted, with a few exceptions.

5.2.2 Results for Hypothesis 2

Insider trading was another crucial factor in IFRS implementation. Many countries introduced additional regulations and mechanisms, including strict disclosure requirements, in order to discourage cases of privileged information. The results of the first test (Appendix III, Table 7) indicate that under IFRS, both the value of trading and the number of traders increased dramatically. More specifically, Greece's insider trading values (Panel C) increased on all measures, including the number of insiders that engaged in a transaction. Australian companies (Panel A) decreased only low disposal trades (LSVALUE) for the first year and low purchase value (LBVALUE) for the next year. In Germany (Panel B), high buying value (HBVALUE) and total selling amount (HSVALUE, LSVALUE) decreased for 2006. UK firms decreased their purchasing activity for 2005 for values less than £1 million (LBVALUE) and selling trades in the same category (LSVALUE) for the next year, and also decreased the total number of buying insiders for 2005 (BID). Such activities do not always indicate fraud; they may be attributable to the fact that under IFRS, all insider transactions must be disclosed, or may be a sign of trust in the company on the part of insiders. Nevertheless, this stock market behaviour needs to be closely observed and recorded in detail.

For this reason, the next step in the main analysis was to examine the potential correlation between accruals and insider case categories. Most people associate insider trading only with stock markets. However, as insiders usually have access to company's operations, they may obscure disclosures in order to manipulate stock returns. Thus, this relates to fundamental analysis and accruals. The results (Table 8) for Australia (Panel A) indicate that each case of insider trading activity under IFRS was positively correlated with accruals (DV), while under old GAAP it had a negative correlation. In addition, firms that engaged in insider trading and had higher size and profitability ratios (LNMV, RESTAS, OPM) were more likely to have higher accruals (Test 2a). Furthermore, large purchases seemed to influence highly leveraged firms

(CGEAR, TLSFU), while large selling affected highly profitable firms (OPM). Finally, big companies with many insiders displayed a negative association with accruals (SALESHA) and a positive association with profitability (OPM).

On the other hand, German and UK firms (Panels B and D) did not seem to be affected by insider trading, as they displayed negative DV values in most cases. However, for both countries there was a positive association between discretionary accruals and size for all years examined (SALETAS, SALESHA, RESTAS, LNMV), suggesting that large firms may have used smoothing procedures to trigger insider trading activities. Finally, in Greece (Panel C), large firms with significant insider activity were positive related to accruals (LNMV), while there was a negative correspondence between accruals and profitability (ROCE). This indicates that insiders in low-profit companies may have displayed high accruals in order to manipulate earnings and increase investors' interest, and seem to have achieved this purpose. Indeed, the results of Tests 2b and 2c confirm this phenomenon: insiders purchased large values in these companies and sold large amounts of companies with positive earnings correlation (EPS), as these firms displayed low profitability and low accruals.

Finally, my last tests for this hypothesis focused on insider trading and stock market performance. Higher abnormal returns connected with insider trading may be an indication that insiders took advantage of privileged information, and thus manipulated firms' stock performance in order to increase their earnings potential. Many suggest that during the crisis these cases may have increased, even in countries with strong protection laws. On the other hand, IFRS was intended to eliminate these speculative procedures, but the results (Appendix III, Table 9) indicate that they only partially succeeded in this. Australia displayed a negative correlation between insider trading and abnormal returns for the years 2007 and 2009, but a positive correlation in 2008 (DV). It seems, therefore, that during the crisis, insiders helped increase abnormal returns, maybe considering the potential domino effects on the market. Furthermore, the results display a positive association between abnormal returns and size for all years examined (SALETAS, LNMV) and for companies that bought and/or sold large share values. This may imply that the stock performance of large firms tends to be more easily manipulated by insiders with high trading amounts. Compared with the results of the previous test, it seems that big Australian companies are more vulnerable to insiders, as they exhibited increased accruals and abnormal

returns. Given that they have high trading volumes, insiders may prefer them as they can better cover their tracks.

Similar results were displayed by the other countries examined (Panels B, C and D). In at least two of the categories examined, they all had positive DV values under crisis conditions and negative values for the other years. IFRS did not control the outbreak of stock transactions arising from the effects of the crisis, nor fully disclose their correlation with insider trading. Concerning the remaining characteristics, similarly to Australia, Greece displayed a positive correlation between abnormal returns and size (RESSFU, SALETAS) for companies that bought and/or sold large share values. In addition, in Germany, a large number of buying and selling insiders preferred highly leveraged companies (TLSFU, DEBT, DEBTE), which is not unexpected considering that most highly leveraged firms exhibited a positive relationship with accruals in the previous tests for the same categories. Finally, the characteristics of UK firms appear to have changed every year, so no universal outcomes could be detected. Overall, the results indicate that the null hypothesis cannot be accepted, as there are no indications that suspicious insider trading cases were eliminated following the introduction of IFRS; rather, in all countries, worrying cases were detected.

5.2.3 Results for Hypothesis 3

The cost of equity has always been one the most critical elements in evaluating companies. Appendix III, Table 10/Panel A presents the results of the first test. Germany had the best performance, as its firms decreased their cost of capital for both years, while during the second year of IFRS implementation, costs increased for firms in all other countries. These second outcomes are no cause for concern, as it was entirely normal for markets to seek to rebalance following the introduction of IFRS which successfully managed to decrease capital costs. Previous research indicates that such costs are positively related to leverage (Damodaran, 2010) and the inflation rate (Gosnell and Nejadmalayeri, 2010), and negatively related to size (Li, 2010), growth in GDP (Vassalou, 2003) and average stock returns (Kofman and Martens, 1997).

Therefore, many factors may affect the cost of equity, although the results indicate that a set of accurate standards may have a greater impact on a firm's cost of equity than any other factor. For example, based on the negative correlation between cost and GDP growth mentioned previously, and considering that most European countries

in my sample exhibited a decrease in GDP growth in 2005 (Appendix II, Table 10), I expected an increase in capital costs. However, the results for 2005 were contrary to expectations. In addition, I sought to determine the impact of IFRS in relation to any correlation between cost of capital, accruals and abnormal returns. Theory suggests that in order to lower the cost of equity, firms tend to attract investors' interest through strong fundamentals and appealing stock performance. For this reason, managers have incentives to implement earnings management to achieve the former, and abnormal returns to attain the latter.

Nevertheless, the results of the second test (Panel B) do not seem to support this theory. Indeed, Greece and the UK exhibited negative correlations between accruals and the cost of capital for firms with low costs for both years under IFRS, while Australia and Germany seem to have made use of accruals in order to lower their costs only during the transaction year (DV). Furthermore, Australian firms displayed negative coefficients between accruals and leverage ratios (CLSFU), meaning that firms with high debt that needed to lower their cost of capital did not choose to use accruals to improve their borrowing prospects. In contrast, in Germany this was a preferred option not only for leveraged firms (IGEAR, CGEAR), but also for highly profitable companies (OPM, ROCE). Similarly, UK listed firms seemed to adopt this process, aiming to obtain better cost of equity (OPM, EPS), while in Greece it was large companies that chose to use earnings management to decrease their costs, as the results show a positive relationship between size and accruals (RESTAS).

In a similar vein, the results of the third test (Panel C) indicate that firms did not use abnormal returns in order to decrease their cost of equity, an outcome that corresponds entirely with previous research (Kofman and Martens, 1997). Germany and Greece produced negative relationships for both years, while Australia and the UK used abnormal techniques only for the crisis period (DV). Nevertheless, there were always cases that tended to confirm or deny the hopeful outcomes of the general test. Australian leveraged companies that did not use accruals in my previous examination seemed to prefer abnormal returns, as they exhibited a positive relationship with these measures (CLSFU, DEBTE). On the other hand, large Greek companies, which seemed to use accruals previously, displayed a negative correlation with abnormal returns (LNMV, SALETAS). These results increase the value of considering both fundamentals and market analysis, as firms that used accruals did not employ abnormal returns, and vice versa.

On the whole, the findings indicate that this hypothesis is accepted. Under IFRS, the cost of capital was lower with more accurate reporting, as in most cases this decrease was not accompanied by earnings management or market speculation.

5.2.4 Discussion of the results of Cycle I

IFRS implementation has been the most significant reform in accounting. The above results raise interesting issues over the ten years of IFRS implementation. Following the literature, I conclude that IFRS have performed better in most crucial cases compared with old national GAAP, and even in cases where they did not succeed, they recovered quickly. It seems, therefore, that European and Australian listed firms in my sample successfully transferred from one system to another with the least possible effects, revealing that adopting IFRS was a helpful tool for improving financial figures. Furthermore, the amendments to IFRS also seem to have been successful in most cases; hence I deduce that, in general, the objectives of IFRS have been realised.

However, the results of this first cycle lead to a conviction that IFRS must proceed with further improvements in a number of areas, as they reveal that firms may still use number smoothing in order to meet their targets. Indeed, Australia, Germany and the UK did not succeed in decreasing FFS cases for all years, while the outcomes also reveal that in every year German and UK non-FFS firms increased their accruals, indicating that under IFRS, FFS cases will increase in future. Only Greece managed to perform better and reduce FFS incidences even during the crisis. Greece also performed equally well in a number of other cases, indicating that small and weak economies may be positively affected by accurate regimes.

This is in line with the previous literature, which states that weaker economies gain the most advantages from a set of accurate accounting measures. Similarly impressive is the fact that, in many cases, large companies were more vulnerable to earnings management even if they were audited by Big 4 firms. In fact, Big 4 companies in my analysis often did not seem to respond as expected, since they restricted mainly highly leveraged firms from increasing their accruals. It seems, therefore, that under IFRS they lost their competitive advantage, and smaller auditing companies appear to have gained on them professionally. For this reason, responsible authorities have considered shortening the obligatory rotation time for auditors. The

results indicate that this has been a positive step, as there is a high possibility that new auditors will prevent firms from using earnings management techniques.

However, we need to be continuously on the alert, because new methods of accounting misinterpretations may be used, and regulating such cases in a challenging economic environment may be difficult. Indeed, I detected cases where falsified firms tended to decrease their accruals and focus on other methods. All these considerations apply, without having to illustrate the year-on-year accruals performance of each company. Therefore, bearing in mind that each case and economy reacts differently, and every company has specific characteristics and motives, my analysis suggests that most companies that applied earnings management in the first adoption period did not use accruals during the crisis. I have also determined the individual standards that may have affected accruals performance for all countries. In fact, even for European countries, each individual standard had significantly different effects. For example, improvements to ISAS 32–39 turned out to be extremely effective in Australia, but did not seem to exhibit the same performance in Germany and the UK, leading to negative performance for their shadow banking sector as well. Moreover, insider trading may be another appealing case for IFRS, as it seems to determine both the fundamentals and the market performance of companies. The results indicate that IFRS failed to entirely control speculative procedures that aimed to increase abnormal returns, but managed to decrease firms' cost of capital, without speculative procedures.

5.3 Results of Cycle II: IFRS versus US GAAP

5.3.1 Results for Hypothesis 4

The introduction of IFRS in the US posed a greater challenge than their launch in Europe. In this case, they did not replace previous accounting regimes, but had to compete with US GAAP in the same market. Thus, I aimed to consider whether IFRS and US GAAP are as different as many consider them to be in practice. Despite the small sample, since few companies chose to reconcile their accounting values under both regimes, the outcomes indicate that following IFRS adoption in the US, the variation between them decreased. Indeed, the mean differences in net income (NI) and EPS were significantly lower than their mean for 2006 (Appendix III, Table 11). As previously stated, the lower the mean of a measurement, the greater the convergence.

On the other hand, differences in assets (NA, RONA) increased for the first year. It seems that, as asset calculations are based on long-term procedures, and in many cases are affected by national laws, more time is needed to eliminate any dissimilarities. This is why relevant studies identify tangible assets as a significant factor in the incomparability between IFRS and US GAAP. However, apart from continued good earnings performance (EPS), there was an impressive decrease in the mean of both NA and RONA variables in 2008 compared with 2007. This signals that assets might further converge over time, and that the SEC's decision was an appropriate starting point for greater collaboration between these two regimes. It seems, therefore, that in these two years, firms usually had higher points of convergence compared with 2006, supporting H4.

5.3.2 Results for Hypothesis 5

In the previous section, I focused only on the level of convergence. Although I found signs that these two standards cooperated better, this does not mean that the introduction of IFRS in the US had no effect. In addition, as few previous studies have straightforwardly compared IFRS with US GAAP, this study aimed, through these tests, to contribute to the current concerns of investors and analysts that IFRS will not succeed in the US. The results (Appendix III, Table 12/Panel A) suggest that firms under IFRS displayed higher liquidity (CUR, QUI, CFSH) and also sustained lower leverage ratios (ETL, TLSFU) for their first year, indicating that both the market and companies were deterred from increasing their borrowing. In addition, under IFRS, firms were lower in size as they displayed negative measures (SALETAS, LNMV). This result was unexpected, as previous research has found that IFRS tends to privilege larger companies (Tarca, 2004).

On the other hand, profitability (PLOWB, ROSC) was higher for firms under IFRS than had been the case under US GAAP, even though convergence of earnings figures was detected in the previous hypothesis. It seems that the difference between the two standards in this field is too large to alleviate in just a year. Besides, most research detects a significant increase in earnings in the first year of adoption of IFRS (Moya et al., 2005). The outcomes of the second implementation year seem to support the initial findings and expectations (Panel B). Leverage ratios (DEBT) were still negative, but size measures had become positive, meaning that larger firms performed better in the second year of IFRS (LNMV). However, investment (DIVCOV), growth

(MVBV, PEG), profitability (PLOWB, OPM, NPM), liquidity (CUR, QUI) and leverage (DEBT) were negative compared with the previous year. This may have been a result of the turbulent conditions that prevailed in the market as a result of the economic crisis, which arose in that year.

Overall, the first indications from IFRS implementation are more encouraging than suggested by the literature, while the underperformance of some investment and profitability measures might have been anticipated due to transition effects and the volatile conditions. For this reason, the results of the next test are important. All studies that have examined the volatility of measures under IFRS attribute this performance to their fair value direction, but in this case the reactions are even more interesting, as US GAAP also has a fair value orientation. However, the results (Appendix III, Table 13) indicate that firms under IFRS tended to exhibit more volatile investment measures (DIVCOV, PE, HOLTA), as well as higher volatility in profitability (PLOWB, NPM, EPS), liquidity (CUR, CASH, QUI, CFSH) and leverage (TLSFU, IGEAR) ratios.

Although such volatility may affect market performance, as it may deter traditional investors, the literature suggests that more variable measures may denote less earnings smoothing (Leuz et al., 2003; Lang et al., 2003). Thus, the results indicate that it is easier for companies and safer for investors if foreign firms do not reconcile with US GAAP but keep their original standards. Similarly, the outcomes for 2008 indicate that, after two years of adoption, IFRS was still more volatile in relation to size (NAVSH), growth (PEG, DIVSHG) and leverage (CLSFU, IGEAR) ratios. In general, this hypothesis delivers a first indication that IFRS performed better than expected in the US. However, this does not mean that they did not have significant effects on accounting statements. Indeed, the outcomes tend to prove that H5 holds, which may curb scepticism regarding the introduction of IFRS in the US.

5.3.3 Results for Hypothesis 6

The research aimed to examine additional issues following the introduction of IFRS in the US by focusing on earnings management, the basic concern of all accounting standards. The results of the first test indicate early signs of less earnings management following the adoption of IFRS. More specifically, firms under IFRS exhibited higher volatility in net profit change (ΔNP/TA) and higher volatility in the change in net profit to the change in operating cash flows (ΔNP/ΔNCF) compared

with US GAAP (Appendix III, Table 14/Panel A). This increase in the standard deviation of the above variables signals a decreased need for earnings management. The second test aimed to determine the correlation between accruals and cash flows from operating activities. Since the analysis in H1/Test 4 revealed that IAS 7 (cash flows) was used by all countries under difficult circumstances, including in their first year of IFRS adoption and under crisis conditions, it was essential to detect how my sample performed in this case.

The results (Appendix III, Table 14/Panel B, Test 2a) reveal a positive correlation between accruals and cash flows in the first year of implementation, indicating that firms with low cash flows exhibited low accruals. It seems, therefore, that IFRS performed better than in similar cases in other countries, and better than US GAAP (which displayed a negative correlation in 2006). Nevertheless, the results for the following year (2008) were less encouraging. The correlation between accruals and cash flows was again negative, meaning that IFRS adopters in US may have managed their earnings using accruals. This was definitely a negative downturn, but it may have been justified, as in 2008 the effects of the crisis started to appear. However, whether attributable to the crisis or other factors, the results were even worse, given not only that the next test (2b) displayed a decline in accruals quality for 2008, but also that US GAAP outperformed IFRS.

For this reason, the research was taken a step further to compare accruals with leverage, size and profitability ratios. Panel C (Test 2c) presents the results. During 2006, firms using US GAAP had a negative relationship with size ratios (SALETAS) and a positive correlation with profitability (OPM, NPM) and leverage (ROCE, CGEAR). It is thus obvious that under US GAAP, large firms and companies with low profitability exhibited low accruals. However, the significant positive relationship between accruals and leverage indicates that firms with debt issues may have increased their accruals to present a different image and avoid the effects of a possible debt violation. Firms under IFRS presented the same picture as under US GAAP, for both years of implementation. Indeed, there was a negative relationship between accruals and size (NAVSH, RESSFU, SALESHA) and a positive relationship with profitability measures (OPM, NPM). The only exception was in leverage ratios where, contrarily to US GAAP, firms presented a negative correspondence (DEBT) under IFRS. It seems, therefore, that IFRS managed to prevent firms with high borrowing from implementing earnings management procedures, although this may simply have

been an effect of the reduced leverage measures during the IFRS implementation identified in tests for H5. In both cases, IFRS seem to have had an advantage over US GAAP in accurately interpreting accounting measures.

Finally, Panel D presents the results of two equally important and significant problems. As previously explained, SPP and LNL are indicative of earnings management, and IFRS managed to deal with these successfully. Indeed, the results indicate a decrease in SPP firms during the first two years of official adoption, while at the same time, for both years again, the outcomes reveal an increase in firms with LNL compared with US GAAP. This is a strong indicator that under IFRS, these firms tended not to manage their accounting measures, but presented their small or large losses in a timely manner. All these outcomes confirm that H6 is valid. Even in cases where IFRS seemed not to exhibit the expected results, their adoption proved to have the potential to prevent cases of earnings management.

This confirms that, when an accurate accounting system meets strong investor protection laws (Koumanakos et al., 2005), earnings management techniques are eliminated. Overall, concerning this set of hypotheses (H4–H6), it seems that, although IFRS did not always perform better than US GAAP, they managed to earn investors' trust, balance performance during the two years examined, and interest many companies from Asia, Canada, Brazil, and even the US, to consider adopting them. Given that the decision to allow their use also enables the convergence process, and that the results reveal that in some cases IFRS perform better than US GAAP and vice versa, perhaps a combination of the two is the solution to eliminating their drawbacks for accounting.

5.3.4 Discussion of the results for Cycle II

Convergence between IFRS and US GAAP is the final step on a path fraught with difficulties. Especially nowadays, many consider it to be useless, as with globalisation of financial markets, investors are familiar with both IFRS and US GAAP, so it is easier for them to analyse and accept both of these dominant regimes, especially after aligning many of their financials, as revealed in tests for H4. Nevertheless, as already mentioned, the literature suggests that local US firms listed on the US stock market display higher earnings quality than foreign firms that are also listed on US markets (Lang et al., 2006; Leuz, 2006). This is attributed to weaker protection laws and regulations for these cross-listed companies. Of course, these studies were conducted

before use of IFRS was allowed in the US, so they focused on financials that firms needed to reconcile with US GAAP. It seems, therefore, that during the reconciliation process, many firms engaged in earnings management, as a change in an accounting measure is always an easy method for smoothing a company's financials.

However, in this study, although I did not compare US firms with foreign companies, my results give sufficient indications that the findings of previous research no longer hold. Indeed, IFRS seemed to perform without serious implications in the US market as, apart from typical adoption effects such as volatile measures, it helped companies to perform better than they had under US GAAP. Contrary to previous studies, my results show that under IFRS, foreign firms seemed to take advantage of the better US market enforcement and regulation. Thus, they performed better and with fewer effects than in other countries during their first transition in Europe. Combined with the results of the previous cycle and the literature, responsible IFRS authorities should consider the US market as an appropriate environment for IFRS, and should proceed with necessary improvements, even before any convergence process. This may be a solution to the harmonisation problems detected in examining many of my hypotheses.

5.4 Results for Cycle III: IFRS and US GAAP versus Financial Crisis

5.4.1 Results for Hypothesis 7

As many people blame IFRS and US GAAP for the development and transmission of the crisis, it is vitally important to determine financial sector performance at the peak of the crisis. For this reason, I focused on abnormal returns in order to examine any extreme stock reactions in this sector. The analytical results (Appendix III, Table 15; aggregated below in Table 6) indicate that the outbreak of the crisis had negative effects on the Australian and European banking sector. On the other hand, the US did not seem to report great losses on the day that Lehman's became bankrupt.

Table 6: Aggregated results for AR and CAR

Event Day	Australia	Germany	Greece	UK	NYSE	NASDAQ
Positive AR	33.33%	14.29%	0.00%	50.00%	72.41%	58.97%
Negative AR	66.67%	85.71%	100.00%	50.00%	27.59%	41.03%
5-Days CAR						
Positive	50.00%	25.00%	0.00%	84.62%	97.30%	94.55%
Negative	50.00%	75.00%	100.00%	15.38%	2.70%	5.45%
10-Days CAR						
Positive	71.43%	20.00%	25.00%	69.23%	94.12%	91.94%
Negative	28.57%	80.00%	75.00%	30.77%	5.88%	8.06%

** These statistics were calculated based only on significant results*

Furthermore, the results show that cumulative abnormal returns (CAR) for most companies in all the countries examined returned to positive values as early as 10 days after the incident, indicating that investors trusted both regimes and authorities, since they seem to have taken all the necessary measures. The only exceptions were Germany and Greece, but even in these countries the results improved. It seems, therefore, that there was a normal recovery process, comparable to markets' performance after sudden events such as terrorist attacks (Raby, 2003). However, such occasions are extremely unexpected, and as a market analyst, I was aware of turbulent conditions long before the Lehman Brothers' issues, providing investors with time to plan possible speculation procedures.

An additional factor must be taken into consideration. As mentioned earlier, abnormal returns express the difference between a company's expected and realised performance. The calculation of expected performance is based on the general stock market index; hence, when there are positive abnormal returns, as in case of the US, this does not mean that stocks did not go down, but that they may not have decreased as much as expected. Furthermore, AR and CAR calculations depict the reaction at a specific time point, rather than the trend in the measure examined.

For this reason, Figure 4 seeks to illustrate the continuum of AR 10 days before and after the event and detect any suspicious cases.

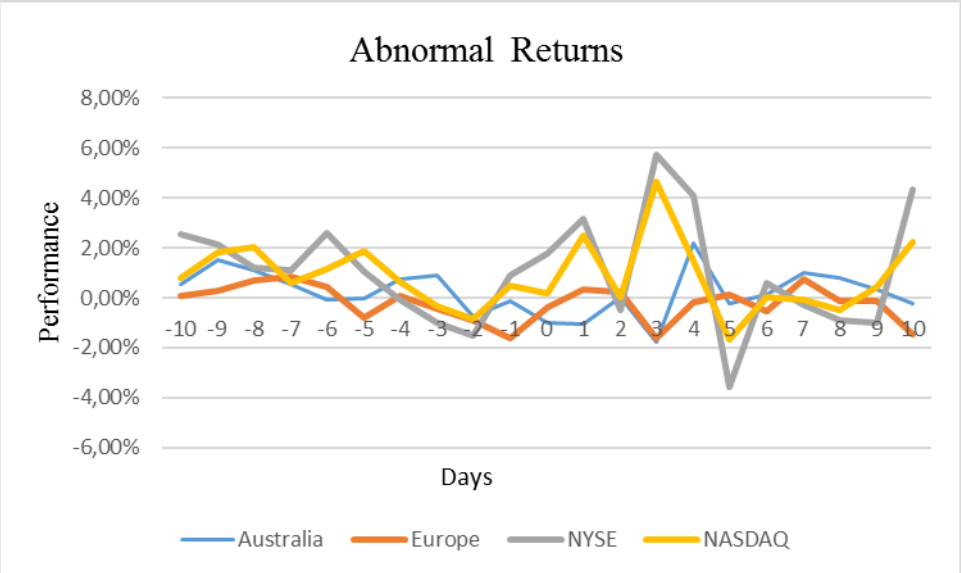


Figure 4: Abnormal returns before and after Lehman's Brothers' bankruptcy

The results shown in Figure 4 reveal some interesting points. Australia and Europe seem to have a smooth curve. Europe has the most stable line, as it appears that any losses in Germany and Greece were counterbalanced by better performance by the UK. Furthermore, all examined countries one or two days before the event exhibited an increase in abnormal sales, which may be evidence of information leakage, because without inside information, abnormal returns should not have been significantly different from zero until the event day. However, the most impressive factor is the extreme volatility displayed by the US markets, both NYSE and NASDAQ, after Lehman's collapse.

In previous indications (Table 6), US markets seemed to act normally, and nothing predicted this irregular US behaviour, not even the slight decrease in their positive 10-day CAR. Nevertheless, this raises concerns about the reasons for this performance. Is it attributable to the crisis or to speculation? In fact, investors may have considered various listed companies to be more vulnerable than others; thus, it seems that some companies extremely underperformed, while others extremely overperformed during the crisis. On the other hand, this move has the typical characteristics of speculation, as firms increased their prices at first, and two days later suddenly decreased their values. These cases are highly important and require further examination. Overall, the results in Figure 4 provide clear evidence that H7 holds, as the crisis influenced firms' performance in all countries examined. Combining these facts with the outcomes of H2/Test 3, which revealed a positive correlation between insider trading and abnormal returns during the crisis, I conclude once again that additional attention is required in this respect.

5.4.2 Results for Hypothesis 8

The reclassification option was the most determinant action of IFRS for alleviating the crisis. The results of the first tests (Appendix III, Table 16) indicate that this action was successful. Test 1 aimed to outline the differences between three categories of companies: those that chose to reclassify, those that did not adopt this option, and US firms that did not have this possibility. Although the first category of firms exhibited lower size ratios prior to implementing this option (RESTAS), it appears that after adoption they increased their size measures, kept their higher profitability (ROSC, NPM) and managed to lower their leverage (CGEAR). In a period of crisis, this performance is highly important.

Moreover, US firms, without any help, also managed to lower their debt measures (ETL). Thus, firms seem to have preferred not to reclassify their assets, and displayed lower size and earnings ratios, with increased leverage during the two years examined. Since reclassified firms managed to lower their accruals for this period (Table 17/Panel A), it appears that the IFRS Board's action was appropriate, contrary to many researchers' predictions that this option would be a window to earnings management procedures. However, these results must be refined, focusing on the characteristics of these firms in conjunction with their accruals performance and abnormal returns. Furthermore, the outcome of this test addresses only reclassified firms, without comparing them with other categories, as in the following results.

Appendix III, Table 17/Panel B presents the OLS regression results for accruals. Although reclassified firms lowered their accruals, in their first reclassifying year they displayed a positive correlation with accruals (DV) compared with non-reclassified firms. The tumultuous conditions and the implementation of a new unknown procedure seems to have resulted in this temporary outcome, as in 2009 the DV value returned to negative. Furthermore, compared with the others, US firms, whether reclassified or not, exhibited a positive correlation with accruals for all years. This performance may indicate either that the effects of the crisis were more severe for US companies, or that US GAAP should have adopted the reclassification option. The results also demonstrate that the profitability ratios (OPM) of reclassified firms were significantly negative in relation to discretionary accruals. This is critical, as firms in this category exhibited higher earnings than firms that did not choose to reclassify (Test 1) and, as proved by this outcome, this higher earnings performance was accompanied by lower accruals during the crisis.

An unexpected outcome was the negative association between accruals and leverage (ETL) for reclassified firms, as this may indicate that disclosers with low leverage ratios tended to increase their accruals and, as previously analysed (Test 1), reclassified firms decreased their leverage. Furthermore, the results indicate that US firms underperformed compared with both reclassified and non-reclassified companies, as they showed signs of a positive relation between accruals, profitability (OPM, ROCE) and leverage (INTCOV). Similarly, the results of the third test (Panel C) depict that reclassified firms performed well. They demonstrated lower abnormal returns during the crisis compared with non-reclassified firms (DV value), and exhibited a positive association between abnormal returns and leverage ratios

(CGEAR, DEBTE), proving that low leveraged firms provide low abnormal returns. Finally, US firms appear to have achieved less successful results, given the positive correlation with abnormal returns (DV). Overall, the outcomes indicate that H8 is accepted: IFRS reacted successfully to the crisis with its reclassification option, absorbing any possible statement effects and accruals increases.

5.4.3 Results for Hypothesis 9

The first test of this section aimed to detect any improvements in ratios following the disclosure amendments for the shadow banking sector under both regimes. The results are based on the fact that the higher the volatility, the better the improvement. In Australia (Appendix III, Table 18/Panel A), for the first year of improvements, firms exhibited more volatile size (SALESHA) and profitability measures (PLOWB), while no safe conclusion can be drawn on the other measures. The outcomes for the compared years 2012–2013 are more obvious, as companies tended to exhibit more volatility in all ratios. Investment (DIVCOV, PE) and profitability (PLOWB, OPM, NPM) ratios were considerably more volatile in 2013, and the same picture is presented for liquidity (CUR, QUI) and leverage (ETL, INTCOV). These facts may be early indications that the second set of IFRS improvements positively affected the shadow banking sector in Australia.

Similarly, Germany performed equally well under both sets of years examined, with more volatile investment (DIVYI, PE), profitability (PLOWB, OPM), liquidity (CUR, QUI) and leverage (ETL, INTCOV) measures. The outcomes for the UK were similar, as it also displayed more volatile variables. On the other hand, the results for US companies were less promising. US GAAP implemented only slight improvements to the banking sector, as their final developments would be presented a few years later; nonetheless, firms exhibited lower volatility in investment (DIVCOV, PE), profitability (PLOWB, OPM), liquidity (CUR, QUI) and leverage (DEBT, INTCOV) ratios for the years 2010–2011. They reacted better in the second year of comparison, as apart from leverage (DEBT, INTCOV), which still reported lower volatility, the other measures performed better.

Furthermore, the next test (Appendix III, Table 18/Panel B) is in most cases consistent with the previous results. Thus, although Australia exhibited the highest R-squared in 2011, it also presented the lowest BVPS, indicating that the first set of amendments was confusing for the Australian shadow banking sector. On the other

hand, BVPS and NPPS had their highest values in 2013, and given that their R-squared was similar, the results confirm that the second set of improvements was effective. Germany and the UK also showed signs of ongoing improvements in performance, as they exhibited significantly positive coefficients of BVPS and NPPS, and both displayed their highest R-squared in 2013. The results in the US were similar to Australia. Although neither performed well in the first years of the first test, they exhibited their highest R-squared in 2011. Furthermore, also like Australia, the US exhibited its highest BVPS value in 2013, indicating that the second set of US GAAP improvements was more effective.

This performance seems also to have affected firms' value, at least for Australian and US companies (Appendix III, Table 18/Panel C). Indeed, as these two countries reacted better to the accounting improvements that took effect in 2013, this behaviour was reflected in firms' higher value (ΔTq) for both countries for 2013 compared with 2012, while it was lower for 2011 compared with 2010 (first set of improvements). Germany's performance was also similar. Although the first tests revealed that Germany achieved better results for all examined years, its firms' values increased only in 2013. Finally, UK shadow firms did not succeed in increasing their value, even though the previous results indicated that UK companies were positively affected by the IFRS improvements. Investors may have been too critical in this case, or IFRS may not have disseminated appropriate information.

Finally, the last set of tests for this hypothesis concentrated on earnings management after the IFRS and US GAAP improvements. In the first sub-test, the results reveal that accruals and operating cash flows exhibited a positive correlation for all countries from 2011 to 2013 (Panel D, Test 3a). Although they exhibited a negative correlation in 2010, the regulations introduced seem to have eliminated cases where shadow banking firms used accruals in order to increase their low cash flows (Land and Lang, 2002). This is an impressive outcome, as in H6 it was determined that it was difficult for regimes to regulate the negative relationship between accruals and cash flows. The only exception to this performance were the results for Germany in 2011, where the correlation was still negative. This may be one reason why firms' value did not increase in Germany in 2011, or why accruals did not decrease. Indeed, the results of the next sub-test (Panel D, Test 3b) depict an increase in accruals for German companies, despite the improvements. In Australia, on the other hand, accruals decreased for both year sets, while in the US and the UK only for 2013.

The results of the third sub-test (Panel D, Test 3c) also reveal interesting details concerning accruals quality. Australia and the US not only managed to decrease their accruals, but also succeeded in improving their quality. Australia had by far the best reaction in accruals quality in 2013, exhibiting the highest R-squared, while Germany and the UK saw little improvement in quality. After each set of improvements, their accruals quality was lower. Therefore, H9 is rejected, as there are no strong indications that all amendments of both regimes impacted positively on accuracy in the shadow banking sector. In particular, IFRS authorities should pay more attention to this point, as the combination of all these results indicates that IFRS improvements were unsuccessful for Germany and the UK.

5.4.4 Discussion of the results of Cycle III

In the literature review in Chapter 2, I referred to the fact that I had never understood why so many studies have been concerned with the fair value orientation introduced by IFRS. It turned that I had not considered emerging effects such as the economic crisis in 2008, and I had also underestimated the IFRS tools effectiveness in dealing with such financial phenomena. Prior to undertaking this project, I thought that the US authorities should have reacted better. However, the results suggest that the reclassification option was successful, helping firms to perform better amid the crisis. US GAAP should have activated this option for US firms.

On the other hand, the US may not have hurried to act because its banking sector seemed to recover more quickly than in Australia and Europe. Either way, both regimes need to consider speculative market cases that might have appeared during the crisis, as I have detected cases of abnormal returns. Finally, concerning regulation of the shadow banking sector, the results seem to be encouraging only with regard to the latest improvements and only for all countries examined. In all cases, we need to await the official changes to US GAAP, while further actions should be considered for IFRS, as Germany and the UK have failed to regulate their shadow banking sector. Overall, IFRS seem to have accomplished their vision of greater transparency and integrity, but further steps must be taken in order to entirely realise their objectives. More information on each individual firm and country, as well as high configuration tools, may be a solution, as further analysed in the next chapter.

5.5 Summary

This chapter has outlined the results of the main analysis of the research relating to each hypothesis. Prior to embarking on this project, as a professional I defended IFRS adoption, expecting that in the long run they would increase the accuracy of financial information and eliminate any need for earnings management. My results confirm this expectation, but not without concern. The analysis has revealed that some countries performed better in some cases, but none succeeded in overcoming all difficulties, while both IFRS and US GAAP need to try harder to defeat the effects of crises. However, the most pessimistic outcome is that my results suggest an overwhelming lack of harmonisation in a number of areas. This uneven performance between the countries examined is in line with previous literature, which states that accounting harmonisation requires not just the implementation of standards, but is affected by many additional factors (Christensen et al., 2008; Gow et al., 2015). My results confirm this concern, and increase academic awareness of this issue. Overall, my findings help prepare the ground for recommendations and suggestions for improvement.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

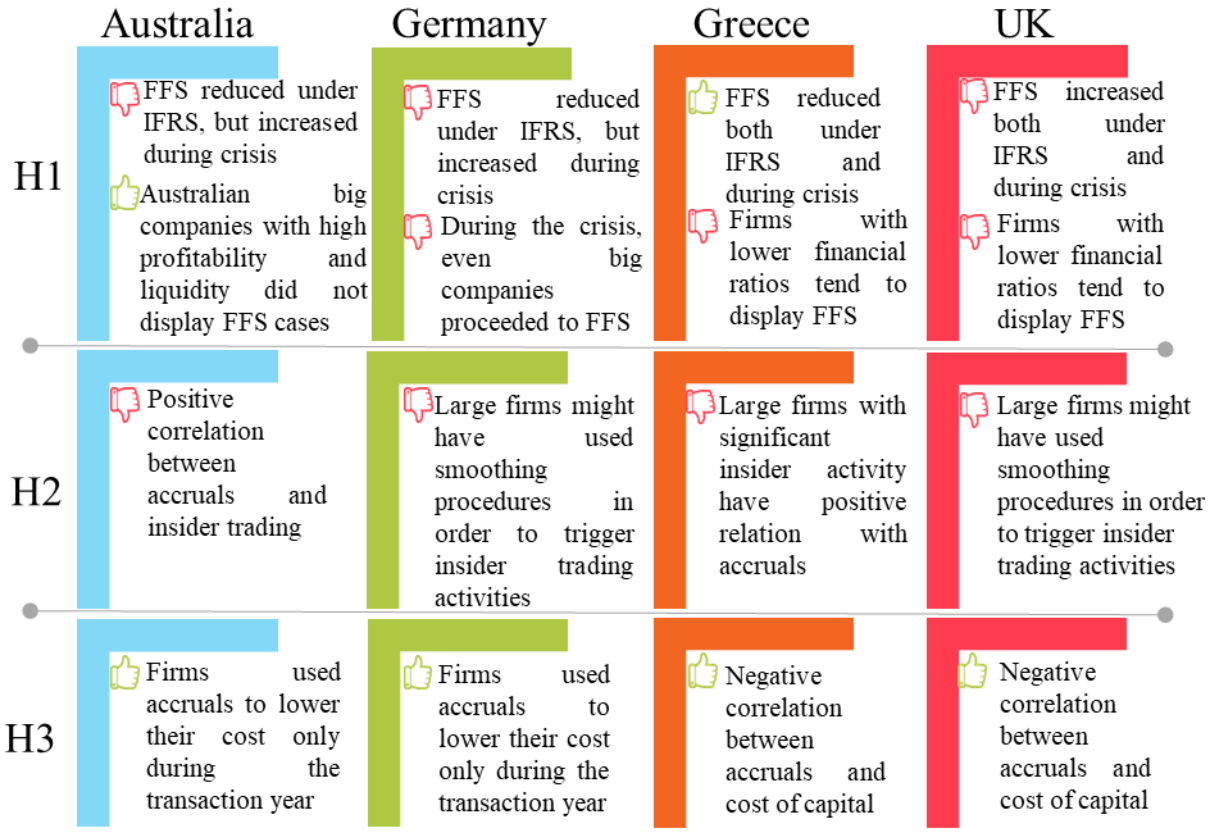
This chapter presents the main conclusions of the analysis derived from my work-based project. I evaluate my results in terms of achieving my aims for this project. As a practitioner and theoretical researcher, I have been able to produce interesting and accurate results. This is the first study to analyse and explore the correlation between earnings management, insider trading and the cost of capital. Hence, I contribute to existing knowledge and theory development by making new assumptions relating to earnings management. It is also necessary to communicate these new findings to market participants, so I contribute to practice by analysing possible methods of evaluation for investors to detect earnings management cases in a timely manner. Finally, I suggest promising generalisations that might provide an appropriate path for practical IFRS amendments that would eliminate accounting misinterpretations in future. I conclude this section with recommendations for further research.

6.1 Evaluation of Empirical Findings

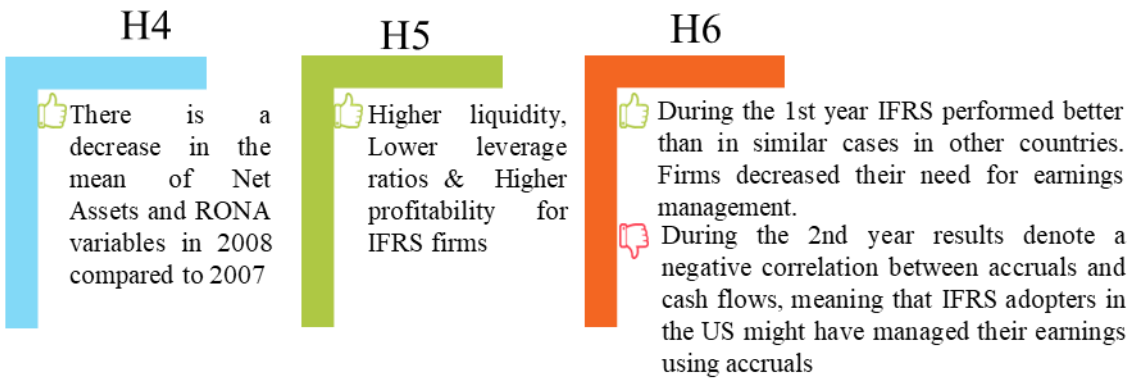
The results discussed in Chapter 5 reveal interesting and contemporary insights into the performance of IFRS following their official adoption. They derive from a work-based research project that aimed to investigate whether IFRS decreased firms' earnings management, to estimate IFRS performance compared with US GAAP, and to discover how these regimes responded to the last economic crisis. The analysis presented in the previous chapter revealed interesting findings relating to IFRS performance. Figure 5 displays my key findings, analysed under my three methodological cycles and according to the results of each of my hypotheses.

Key Findings

Cycle I - IFRS vs old GAAP



Cycle II – IFRS vs US GAAP



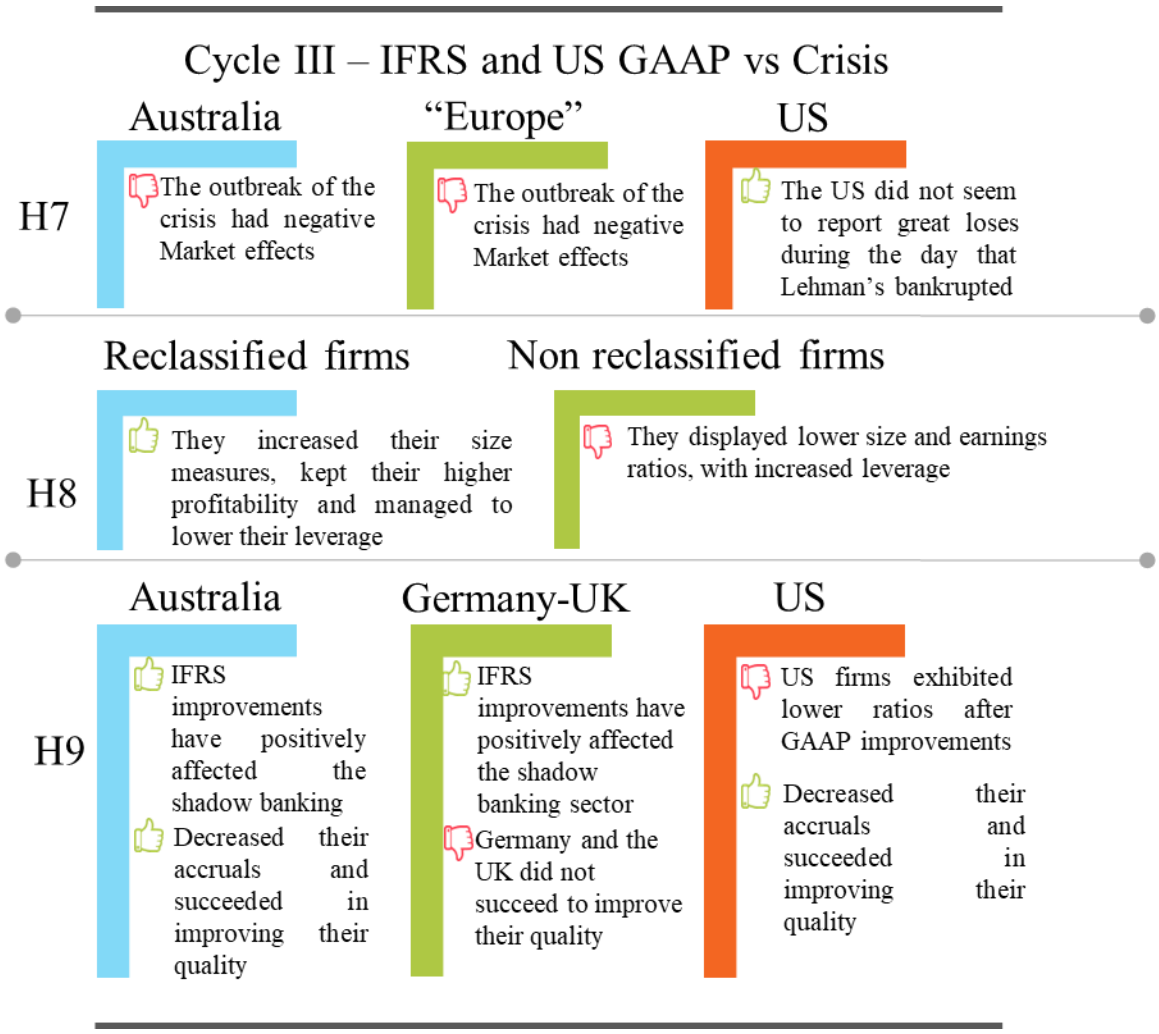


Figure 5: Key findings

Having completed this process, several questions still remain. Did I successfully apply my research plan as described in Chapter 1? Did I answer my research questions? Did all these results add new knowledge?

These questions can all be answered positively. I reviewed the literature and separated it into three chronological phases. In this way, I was able to better determine whether information related to IAS or IFRS. I also clarified my ontological and epistemological position. Therefore, I was in a position to decide on my methodological process. In combining these with my expertise in the accounting professional field, I employed an action research process. Implementing three research cycles enhanced my initial research questions and helped me to develop my final theoretical and practical research questions (Appendix I, Table 7). This guided my development of appropriate hypotheses and models. Thus, I not only succeeded in implementing my plan, but the outcomes of the project prove that my procedures were

appropriate. Despite the difficulties in obtaining and processing amounts of data, I successfully ran statistically accurate models of analysis that led to findings with theoretical, practical and ethical implications.

Theoretical concerns

My results reveal issues of high academic interest. Indeed, they prove that every case, firm and year had unique characteristics, which had different effects on their performance. For example, Australia exhibited major differences from European countries, and more interestingly, Australian shadow companies acted more similarly to US than European firms. Therefore, IFRS seem not to be appropriate for Australia or may differ from A-IFRS. However, in the other European countries examined, I detected diverse reactions in a number of cases. Indeed, my empirical findings, as described in Chapter 5, indicate considerable diversity in the reactions of different countries for the same tests. For example, with regard to the individual standards responsible for encouraging speculation, I noticed subsequent differentiation in my sample. Therefore, the harmonisation process seems questionable. Through the literature review, I realised the importance of harmonisation between countries that follow IFRS. Ball (2006) concludes that, despite the implementation of international standards, local practices have great effects on them, increasing her scepticism about IFRS adoption. Thus, she asks: 'Does anyone seriously believe that implementation will be of equal standard in all countries that have announced the adoption of IFRS in one way or another?' (Ball, 2006; p.31). Nobes (2005) is similarly concerned about whether variations between different regimes are observable following IFRS adoption. Although I had not considered this question when I planned this research, and contrary to Ramanna and Sletten (2014), my empirical results question the harmonisation of accounting standards under IFRS.

Furthermore, I contribute new insights into the earnings management debate, as this is the first such study to apply longitudinal analysis, enabling me to determine accruals performance through a year-by-year examination of each firm separately. It is easy to claim that accruals increased during the crisis, but it is more difficult to detect whether firms that increased their accruals during the crisis also increased their accruals following IFRS introduction. Similarly, I contribute new knowledge relevant to academics and professionals, as I have proved that IFRS was ineffective in controlling falsified statements. I have revealed that larger companies were often

more vulnerable to earnings management, and have found that big auditing companies do not always prevent falsified statements, while when firms change their auditors there is a reduced incidence of earnings management. Furthermore, my results provide insights into another major issue relating to IFRS: the initial advantages of adoption do not seem to be maintained, as I detected differences in year-on-year performance, even in the same country. Insider trading, crisis effects and banking regulations are examples of where IFRS have not stabilised performance in all years and countries examined. Thus, I have illustrated that the characteristics of and motives for falsified statements are changing. I have also proved that foreign companies operating in the US market performed better under IFRS, and that IFRS manipulation of the crisis was appropriate.

Practical implications

In this project, I aimed to combine firms' financials with market models to bring together accountants and investors to exchange valuable information. Based on this, market participants may be able to create a framework of categorisation for firms and countries, so as to make investment decisions more easily and quickly. Thus, accountants might consider a firm's performance as expressed by market value, and market analysts might codify important accounting information on which they should focus. In addition, investors who consider my results might combine and examine my ratios in more detail so as to reach supplementary conclusions. Therefore, my project has considerable potential for applicability and dissemination by finance professionals.

As a practitioner in accounting and the stock market, I have updated my professional databases according to my results, and can confirm their value in practice. For example, I estimated the risk of investing in a Greek listed company and, based on my analysis, concluded that for Greek firms, revenues have a positive relation with accruals for all years examined, except 2006 (Appendix III, Table 6; results of H1/Test 3). This indicates that high revenues are likely to result in earnings management. Furthermore, from the same analysis, I have also determined that IAS 32–39 are a favourable means of eliminating earnings management for Greek firms. These standards make several clarifications, including the presentation of financial instruments in the classification, recognition and measurement of financial assets. Thus, investors should focus on these standards, especially if a company has

subsidiaries in countries that have not officially adopted IFRS. Concerning my results for insider trading, my analysis reveals that in Greece, large firms with significant insider activity are positively related to accruals. I have also determined that Greek firms display a positive correlation between abnormal returns and size for companies that buy and/or sell large share values. In my opinion, these two factors, namely insider trading and abnormal returns, are the most important in evaluating stock performance. For example, a large Greek listed company with increased insider trading activity may be subject to speculation.

Finally, concerning the cost of capital, I have found that large Greek companies choose to use earnings management rather than decreasing their costs, as the results reveal a positive relationship between size and accruals. Thus, a company with high debt may have considerable incentives to engage in earnings management. Based on these results, I would refrain from investing in companies such as Folli-Follie.[33] I do not suggest that all listed companies with increased revenues in Greece have managed their earnings, but if a company has increased revenues, high insider trading activities and large debts, then I suggest that investors should consider their options. Of course, such combinations may also be displayed in other countries in my sample. Overall, market participants might apply and combine the key concepts revealed in this project to identify any misinterpretations before investing. My intention is not to suggest specific investment alternatives, but to lead market participants to make decisions after reviewing and correlating similar cases that need increased awareness, as a path to more rapid evaluations based on specific characteristics of countries and firms.

Ethical issues

One significant challenge is creative accounting practices, which continue even under IFRS. As a bookkeeper and accountant, I have had many opportunities to apply creative accounting techniques, but I have always believed that any outcome of this activity would have only short-term benefits. In addition, firms' stakeholders and stockholders should always know about the practices in which their accountants engage so that all interested parties have the same information. Through my engagement with the literature and from my working experience as a market analyst, I conclude that most researchers and investors consider earnings management to be a

[33] The Greek stock market was recently stunned by the release of a report on the Folli-Follie company (http://www.qcmfunds.com/folli-follie/) by QCM. This is the same fund that detected the Globlo case. Folli-Follie has been temporarily delisted from the Greek stock market.

fairly routine procedure, whereas I believe it to be highly unethical, as such cases provide privileged or early information to specific market participants. Hence, some market players gain personal benefits over other investors who do not have access to such information, which might differently determine their strategies.

Companies that deliberately falsify their financials cannot disorientate investors forever, and managers will eventually realise the short-term benefits of their actions; however, I believe that we cannot leave the market to self-regulate, but must protect all market participants. In cases like Enron, Globo and Folli-Follie, as previously mentioned, some investors lost money, and my working experience shows that it is average investors with no privileged information who tend to suffer the greatest losses. Therefore, earnings management is a highly important and challenging issue. It leads to privileged information, and hence to unbalanced markets and significant losses for investors, raising important ethical concerns. It is undoubtedly a form of fraud, and should thus never be normalised; all possible steps should be taken to reduce it. Having detected many such cases during my professional career, and believing that all market participants should be able to invest under equal circumstances, I was motivated to pursue this project. Moreover, I believe that through my results and outcomes, I may effectively contribute to reducing earnings management, revealing that it is highly detrimental to investors who do not have access to privileged information. Thus, I may help investors and accountants to detect earnings management cases in a more timely manner, and assist authorities in starting to consider the right tools to eliminate this phenomenon.

6.2 Policy Suggestions

The previous conclusions reveal the importance of accurate information. Although the literature suggests that firms generally tend to report sufficient information (Mediratta and Jain, 2007), my results reveal that nowadays, possibly fraudulent cases have different qualitative characteristics than in the past. Therefore, financial reporting quality needs to be reinforced, with information continuously updated in a timely fashion. All announcements, including annual reports, press releases and websites, should provide precise details on firms' operations, investments and financing (Chang et al., 2006). For this reason, many companies are inclined to disclose additional data voluntarily to reduce uncertainty and information asymmetry (Iatridis, 2008). However, further action is needed to achieve total accounting quality

and efficiency. I propose a two-step framework to enable IFRS to deal with future challenges in practice and to overcome any disadvantages revealed by my empirical findings.

6.2.1 Redesign the annual report

Based on the outcomes of this research, IFRS should focus more on separate standards relating to earnings management and falsified statements, which continue to cause concern. Despite their amendments, the results confirm that the drawbacks of IFRS include late reaction and absence of prediction. Furthermore, I have detected severe cases of insider trading and concerns over auditors' inspections. The basis of audit opinions rests on assessments and judgments by the company's directors. Therefore, as auditors have no responsibility for material misstatements, they may undertake inadequate forensic accounting checks. A useful step to dispel this impression would be to introduce mandatory half-yearly auditors' reports. However, greater statutory changes should be made to IFRS to enrich the information provided to auditors and investors. Following Mankin et al. (2017) who suggest additional disclosures, and contributing to a discussion that few previous studies have considered (Gow et al., 2016), I suggest the total redevelopment of firms' annual reports. This would be a first step that might lead to a tidal wave of change in the information provided, and might address many of the effects revealed by Hypotheses H1 to H3.

It is undeniable that annual reports often contain unnecessary information that may mislead investors. Hence, they might be divided into two parts, consisting of basic and additional information respectively. Each part should be further categorised and organised into clusters of information according to thematic tasks and time events. As the needs of owners, investors, authorities and academic researchers differ significantly, each interested party would have more targeted and precise access to necessary notices, making IFRS less complex and promoting the usefulness of financial statements (Hoogerdoorn, 2006).

Moving a step further, I propose that all these data should be placed in the same predefined pages for every company. For example, the balance sheet should be placed on the first page of every annual report, making it more easily detectable, more precise and less complicated. This would create a specific point of interest for due diligence, providing opportunities for early detection of any signs of audit fraud. These should obviously be enhanced with additional notifications, including on

insider trading, discretionary accruals and cost of capital calculations, covering a historical period of 10 years. All these modifications would help investors and accounting professionals deal with changes, such as the new electronic balance sheet to be introduced by the IFRS Board.

6.2.2 Development of an electronic database for real-time validation of financials

The outcomes of this research reveal considerable concerns about lack of information, failure to combine necessary data and differences between IFRS economies. For example, Australia has the most restrictive law on insider trading, but the absence of databases for gathering directors' transactions reduces its advantages. Furthermore, in most cases, auditing rules are recorded according to each country's national regulations, but many national tax laws and regulations go against IFRS norms. Dealing with these unbalanced situations is essential for IFRS, to alleviate any differences between countries and to provide a stable environment with equal possibilities for all firms. Thus, in addition to reforming annual reports, there is a need for appropriate tools to gather and transmit data to investors and authorities according to their specific needs. Thus, I suggest the development of an electronic database platform for all IFRS countries, for the same reasons for which SEC introduced Edgar,[34] but with enhanced potential. IFRS would hence supply the targeted, accurate and timely information necessary to promote the progress of accounting science. This would resolve any adverse effects of H1–H3, enhance the potential for IFRS to compete with US GAAP (H4-H6), and offer appropriate tools to proceed to targeted amendments (H7–H9). Overall, apart from obvious returns for companies and investors, this platform would offer three key advantages.

1. Combined and supplementary information

As previously stated, firms must adhere to many accounting rules and procedures originating from different authorities. For example, a listed firm must respect national taxation and accounting policies, IFRS standards and MiFID regulations.[35] Thus, it is

[34] EDGAR is the acronym for the Electronic Data Gathering, Analysis, and Retrieval system. This is an electronic database where companies submit official forms and documents required by law by the SEC. The SEC is in a position to collect, validate, control, distil and forward this information to every interested party, free of charge.

[35] MiFID is the Markets in Financial Instruments Directive (2004/39/EC). The European Union adopted this directive in 2007, seeking to improve the competitiveness of EU financial markets and create a common set of rules for all of them. In 2014, MiFID II was introduced, an improved version of MiFID. For more details, see https://www.esma.europa.eu/policy-rules/mifid-ii-and-mifir.

responsible to the tax and IFRS authorities, the Capital Market Commission and the Market Exchange Committee, while each of these authorities require information and operate their own controlling mechanisms. This phenomenon is more marked for the banking industry, which is also accountable to the sensitive rules of the Basel Accord. This creates an extremely bureaucratic environment that offers nothing but reduced transparency for managers, owners, investors and accountants, and limited auditing effectiveness for authorities, leading to possible statutory deviations.

At the same time, some companies take advantage of this confusion to speculate on earnings and eliminate auditing controls. Therefore, the platform would offer the possibility for controlling mechanisms to cooperate harmoniously, and collect, embody and combine all their separate data into a single source. In addition, supplementary information could be displayed on the platform, such as merger intentions, holdings for sale and lease contracts, thereby clarifying necessary details for all separate standards that until now have been difficult to obtain under current publishing criteria and reporting formats. In addition to being of interest to listed companies, this database might be expanded to emerging markets, increasing transparency and funding opportunities, and even to unlisted companies, making it easier for them to adopt IFRS.

2. Easy and accurate cross-tabulation of data

The platform proposal would also offer cross-tabulations of financial statements between companies. This would enhance the role of auditors and investors, eliminating cases of companies reporting potential transactions and earnings as accrued. For example, Globo was accused, among others, of preparing falsified invoices for sales to other companies that the authorities had neither the opportunity nor the means to confirm. However, through my proposed platform, such cases would be detected, as all transactions would be electronically recorded, giving access to targeted information and allowing authorities to cross-tabulate the data. In addition to financial statements, it might be possible to juxtapose auditors' statements and opinions, directors' reports and credit assessments or similar data, split into sections such as corporate governance, risk profile, debt covenants, changes in accounting policies and insider trading transactions.

3. Enhance IFRS improvement tools

Finally, my proposal would enhance procedures for improving IFRS. IFRS seem to exhibit a specific evolutionary cycle. Usually, the market detects a problem, the IFRS Board invites responsible parties to a public debate, researchers focus on it, and then the Board designs a long-term plan. In the previous two sections, I described how the platform would help IFRS during the debate phase, enhancing available data and producing a more effective and accurate environment for all interested parties. However, in addition, my proposal would offer appropriate tools for the design phase. Thus, I would aim to supply the groundwork to virtually back-test any new standards or amendments, for a sample of companies or countries, simulating IFRS amendments and initiations.[36] This is the first time such a concept has been introduced into accounting, and might revolutionise and mitigate the effects of any IFRS decisions.

This technique responds not only to the question of whether IFRS amendments have been successful, but also to the most critical question: what would the results have been if other alternatives had been adopted? This would equip standard setters with new procedures and data that should decrease inconvenience and practical concerns during improvements, while eliminating delays in decision making. Indeed, many observe that it takes a long time for new standards to be incorporated within the main IFRS principles, and by that time, in some cases, circumstances have already changed. My suggestion bridges the gap between theoretical and practical implementation, and grants the security necessary for new standards to be released successfully. This would increase the confidence of the IFRS Board, eliminate ambiguities and provide the groundwork for close monitoring of the evolution of proposed regimes.

6.3 Areas for Future Research

This study identifies several issues arising from IFRS adoption and reveals interesting results that may prompt further study. Although IFRS seems to have been analysed to saturation point, recent history has proved not only that many issues have not been solved, but also that new problems have emerged. Therefore, future research should focus on a number of issues. First, it needs to further address the causes of

[36] Back-testing is a very effective method in technical market analysis. The analyst uses real historical data in order to simulate his trading strategy over a period of time. Thus, he tests the behaviour of his model under real circumstances, analyses the results and estimates the predictive accuracy of his approach. Analysts use this method to examine their strategies efficiently and safely.

falsified statements. My results indicate that IFRS did not succeed in eliminating FFS cases during the period studied, while at the same time firms seemed to find additional methods for earnings management. Accordingly, future studies should detect these methods and their correlation with FFS firms, not only under IFRS but also under other national regimes, and even under US GAAP. A closely related issue is firms' consolidated figures. Many insist that consolidated figures are more vulnerable to earnings management and transfer pricing, as it is easier for firms to hide their problems in consolidated statements than in separate balance sheets.

Similarly, researchers must consider whether the proposal to repeal compulsory publishing of quarterly accounting results may have negative effects. Quarterly filings have always been unaudited and have been accused of facilitating falsifying techniques, but as these figures are now published voluntarily, it may provide managers with an additional motive for implementing misleading window-dressing procedures.[37] Consequently, earnings management seems to be a continued threat to IFRS, not only in terms of firms' fundamentals, but also in their market performance. For this reason, my research has focused on insider trading, but I have only analysed dealing by directors. Thus, it is important for future studies to obtain information on shareholders' dealing and stock option transactions, while comparing the date of such transactions with potentially significant events for the company.

In addition to the previous issues, future research should determine whether IFRS have eliminated bureaucratic procedures and managed to perfectly coordinate all related mechanisms and authorities, since they are in a cycle of endless improvements and assessments. Therefore, studies should determine whether they have improved typical characteristics and efficiency in a number of actionable events in recent audit cases, such as the Globo company, as well as the banking system which is still is affected by the 2008 crisis. Thus, standard setters should order the development of a system that will provide more accurate depictions of companies. For this reason, there is a need to identify interactions between accounting and banking regulations, which usually lead to off-balance-sheet financing effects, prettifying banks' performance. Thus, optional tools for IFRS should be enhanced.

[37] Mutual funds, portfolio managers, investment firms and similar companies must present their performance reports to their clients and shareholders annually. Near to the date of such announcements, they try to improve the appearance of their performance. For this reason, they engage in buying and/or selling activities in order to establish an attractive portfolio. I refer to this as window dressing, which usually consists of selling holdings with large losses while purchasing high-flying stocks.

For example, voluntary disclosures are viewed as a positive development, providing reliable information; but do firms use this option to reflect their true economic background, or simply to mitigate the concerns of a negative economic year and mislead investors? Furthermore, as the catalogue of countries aiming to adopt IFRS increases, the challenges have also increased. Thus, studies should focus on the implementation of IFRS in Japan, as it has permitted voluntary application of IFRS since March 2010, and the Tokyo Stock Exchange (TSE) recently announced that 141 listed companies had adopted or planned to adopt IFRS. Of course, there are other cases requiring further research. European authorities have expedited the implementation of IFRS in the public sector by formulating International Public Sector Accounting Standards (IPSAS). Future research should focus on this evolution and how it may interact with IFRS. Finally, as most accounting studies share the same objective motives, it would be interesting for future research to analyse the profile of market participants, taking into consideration their feelings and attitudes, to discover the real motives for their behaviour, for example in relation to earnings management. Overall, IFRS seems likely to remain in the limelight for a long time, introducing an imperative need for further practical studies.

6.4 Conclusions

In this chapter, I have reviewed my research approach to determine whether I have successfully applied all steps. This has been a significant accomplishment, as I have implemented my statistical analysis and achieved my aims and targets. As a result, I have raised enlightening theoretical and practical concerns, and have highlighted potential considerations in IFRS adoption. Finally, I have combined the project's outcomes to propose a set of conclusions and actions that might contribute to and practically facilitate future prospects for IFRS. Therefore, it is crucial for financial professionals to consider these recommendations and for researchers to examine the future challenges outlined.

CHAPTER 7: REFLECTIONS ON IMPACT AND PROFESSIONAL LEARNING

7.0 Introduction

In this final chapter, I focus on the personal and general impacts of my results and process. The dynamic accounting environment has many participants, including financial authorities, academics, accountants and investors, who demand more objective and reliable information to enable the capital market to function more efficiently and cost-effectively. In Chapter 1, I outlined the significance of this study to specific professionals. In this chapter, I aim to show how the research has impacted on my professional development, to evaluate my engagement with learning, and to explain how the results may impact on business and academia.

7.1 Reflections on Personal Learning and Professional Development

Academic research inspired by professional needs articulates both theoretical knowledge (Brannick and Coghlan, 2007) and practical considerations. It combines theoretical and practical knowledge, impacting on both personal learning and professional awareness. Thus, I understood that although results are important, knowledge is intrinsically gained throughout the process. During all stages of the project, I have expanded my abilities and gained new cognitive skills, and uncovered and further developed my assumptions, interpretations and expectations. The literature review enabled me to understand and expand my knowledge of other studies and to develop an integrated picture of IFRS and US GAAP. I am now able to critically review and evaluate the theoretical background of this subject area, focusing on the crucial points of published research.

Similarly, by setting out a specific philosophical level, and evaluating and deciding between different epistemologies, I perceived and questioned my epistemological and ontological assumptions, which I had never done prior to embarking on this project. I gained a coherent knowledge of methodology, and successfully designed and implemented appropriate tools and methods to develop a reliable methodological framework. Even my engagement with data analysis programs was surprising constructive, as I was able to train in statistical analysis and become familiar with useful details. Therefore, I obtained the necessary background and confidence to reflect on this knowledge in order to open my mind to different

ways of thinking. Apart from typical competencies, such as patience in the data process, work systematisation and checking resources, I was introduced to new methods for performing accurate and innovative procedures such as longitudinal analysis. The project also taught me to detect issues, focus on them and provide solutions.

In addition, apart from these theoretical benefits, the processing experience helped me to implement all the results of the project directly in my professional environment. My results gave me greater trust in IFRS in the US and under crisis, prepared me for the new IFRS 9, the first version of which did not seem to have the expected market outcomes, and encouraged me to be suspicious of insider trading, as the regulatory framework is incomplete and deficient. Indeed, as a market analyst, I now pay greater attention to stocks whose directors have engaged in insider transactions, and I am in a position easily to combine this information with a number of other factors, such as the size of the firm, its costs and market performance.

Thus, I have had an opportunity to implement and enhance new working perspectives, as I have gained greater familiarity with IFRS and US GAAP and have developed an integrated picture of these standards. Along with the other research outcomes, this has helped me to focus only on required information, in a more timely manner and with more accurate results for market analysis, increasing my professional competence and strengthening my career prospects. I am now able to distil from annual reports only the information I need, which is essential for an accountant. I have therefore acquired the necessary scientific background to shape my perspectives on events and identify not only useful patterns and advantages, but also focal points concerning the analysis and auditing of listed firms.

In view of all these factors, I have changed my investment strategy in my work as a market investor. Indeed, I have adjusted the determinants for selecting stock companies to include in my investment portfolio based on the outcomes of my project. I was therefore protected from the recent downturn in the Greek stock market because I was able to identify that several listed companies might have speculative financials (for instance Folli-Follie, mentioned in Chapter 6). This has undoubtedly made me more confident in statistical analysis, proving that fundamental analysis is effective as long as there are accurate inputs.

However, during the research, I had to deal with many concerns that I had never considered prior to participating in this programme. I had thought that my educational

and professional background would provide a strong foundation for such research, but I faced a number of challenges and ethical considerations that changed my thinking. My first concern was that I had to collect and analyse a vast amount of data. Although I have always been occupied with numbers, it was challenging for me to engage with them on such a significant project under such restricted conditions. I recognised their importance for the first time. I also had to deal with limited time, a lack of resources for some financials, and conflicting ideas and frameworks. These were critical issues that might have led to failure and loss of self-esteem.

Systematic work, prudent time allocation and focusing on real needs were the only solutions to overcoming these obstacles. I was also surprised by how enlightening and necessary were my supervisors' and advisors' notes and guidance. The research enabled me to transform all these issues into strengths, reinforcing my research, analytical and planning abilities. Having achieved these competencies, the feeling of success is greater. I was finally able to organise my thoughts and deliver a specific action plan to complete this research. Overall, it was an enlightening experience that contributed substantially to my learning. It forced me to identify and develop capabilities that might prove useful for further investigations of similar topics.

All these important reflections, along with practical decisions and innovative ideas, have equipped me for future personal and professional development, enabling me to proceed with my future business steps. The integration of this programme enabled me to contribute effectively to major changes in the world of accounting and analysis.

7.2 Impact of the Research

In this section, I focus on some thoughts originating from my results and proposals in order to specify my overall impact on theory and practice. As the research examined several issues relating to IFRS implementation, it revealed interesting results sometimes contrary to my general expectations. These outcomes exposed four issues. The first is that there seems to be a problematic relationship between professionals, authorities and researchers. Professionals develop market trends, authorities try to regulate them, and researchers investigate whether these regulations have been successful.

My contribution to this issue is the platform proposal described in Section 6.2.2. In this way, I aim to reduce these differences between market participants, helping

authorities to manage such issues more effectively. This will help make business reports clearer by bringing together all the aforementioned categories, but it also has academic implications, as it will improve the assurance and statistical accuracy of academic research, eliminating the time gap between theory and practice. My second issue is closely related: the deficiency in targeted information in firms' annual reports. Through my proposal to redevelop annual reports, I aim to alleviate this phenomenon, laying strong foundations for a major change to the accounting system. This change would affect the core of the financial reporting system, with repercussions for all interested parties, including accountants, stock analysts, credit rating companies and, of course, theoretical researchers, who would have easier access to data.

In addition, the project reveals a gap in the ability of IFRS to react effectively and in a timely way to critical cases; therefore, considerable modifications are required, focusing more on auditors' and firms' reporting procedures. In this vein, the research is influential, as through its hypotheses, it contributes to this theoretical debate and highlights issues on which the IFRS needs to focus. However, as these improvements would have a direct impact on accountants, auditors, investors and analysts, I have provided warnings and solutions that should be taken into consideration by professionals and firms to equip them for future patterns in the accounting profession. Finally, I have detected substantial dissimilarities, not only between countries' performance, but in year-on-year comparisons in the same country. These results will have a considerable impact on professionals, as it is obviously very important for them to realise that countries that have adopted IFRS do not react similarly in all cases, for example Australia and European countries in my tests, and that European firms are not reducing falsified statements year on year.

All these results are valuable for two further reasons. First, since most listed companies operate internationally and have branches in many countries, but consolidate all of their accounting figures under IFRS, investors should be familiar with the differences that I have detected. Second, accountants and analysts also act globally, as they obtain international accreditations and professional certificates, so they follow many foreign companies in order to be competitive and effective for their clients. Overall, apart from these considerations, professionals need to fully understand the applied behaviour of IFRS in my tests to gain accurate perspectives on their performance. For example, in H2 I examined insider trading and detected that suspicious cases of directors' deals increased under IFRS and during the crisis.

Combined with the fact that accruals are lower and abnormal returns higher under IFRS, it is futile for professionals to try to detect such cases of fraud from accounting figures. They should focus elsewhere to detect and justify deviations in the stock's performance, as such information is not divulged until much later in annual reports. This fact should also trigger authorities' interest in taking drastic measures to eliminate this phenomenon, and the results indicate an appropriate framework for such action.

For all these reasons, the findings of this research may impact on European, Australian and American firms and contribute to the academic and business research communities. They may be used by financial authorities, academics, accountants, investors, firms' insiders and people from every part of the financial environment, as analysed in the following sub-section.

7.3 Audiences and Dissemination Strategy

As previously stated, this research has both practical and theoretical implications, since I intend to familiarise my audience with the concept of earnings management under IFRS, to suggest how this phenomenon might be eliminated and to establish a database that might help investors make appropriate decisions. Therefore, the key audiences for my research are:

- *Academics*

  In revewing the literature, I established that few recent studies focus on earnings management. However, my results suggest that firms are still engaging in earnings smoothing activities. Therefore, based on my findings, financial and accounting researchers should further discuss earnings management issues in light of current tools and motives for accounting misstatements.

- *Market analysts and investors*

  As revealed in this research, there are considerable differences in the IFRS performance of the countries examined. Thus, it is important for analysts and investors to realise that, although many countries follow IFRS, in practice there may be considerable divergence in their effectiveness. Hence, it is highly important for them to better estimate country risk and determine whether IFRS perform better in weaker economies like Greece, in countries like the UK that used to follow regimes similar to IFRS, in economies like Germany with different accounting philosophies, in countries like Australia that follow IFRS values but

have their own accounting boards, or in environments like the US with high competition and restrictive regulations. By enhancing their tools of analysis with my results, they might detect more effectively not only how each country responds to IFRS improvements, but also cases of earning management, thus improving their investment strategies.

- *Accountants and auditors*

  Similarly, it is essential for auditors and accounting professionals working with IFRS companies to detect and consider the characteristics of firms that engage in earnings management. My analysis will give them a deeper understanding of how accounting regimes perform under certain circumstances, and which individual standards have been most used by companies to manipulate their accounting figures. However, it is also important for them to realise that managers may use methods other than creative accounting to produce financial misstatements, such as abnormal returns and insider trading. Thus, they may be able to help reduce fraud cases under IFRS, protecting investors who have no access to privileged information.

- *Accounting and market authorities*

  It is critical for authorities in countries that follow IFRS to reduce fraud. My analysis is important in giving them an understanding that, despite improvements to their regulations, companies still engage in earnings management, while managers seem to have changed their methods for accounting misstatements. The authorities therefore need to cooperate closely and focus on the reasons behind such procedures, so as to enhance improvements to their regulations.

The findings of this project must be communicated effectively to these audiences through their representative committees, structures and networks. My dissemination strategy is as follows.

Concerning the academic audience, I aim to publish my results in accounting journals and newsletters, and to present my key findings to accounting conferences, workshops and seminars. Addressing market professionals may be more difficult, as most investors and analysts seem to trust their own tools for analysis and are sceptical of changes. However, as my outcomes result from statistical models, I am confident that my project will be highly appealing to accounting and market professionals, raising their awareness of key issues. Therefore, I plan to identify and engage with the

most important market participants who may capitalise on my findings. I plan to use my professional communication channels and, more specifically:

- Present my results and suggestions to the annual meeting of the Greek stockbrokers' association.
- Communicate my key findings and outcomes at seminars organised by the Greek trading club of which I am a member and which cooperates with similar global trading communities, so as to gain peer review and feedback.
- Introduce a newsletter, based on real market examples of firms that might engage in earnings management techniques. This could be disseminated through a monthly webinar organised by the stockbroking company with which I cooperate, and in which many organisations, global investors and market analysts participate. I would support my results and suggestions with real cases, and present my strategy.
- Exhibit a version of this project with the key findings and outcomes in order to disseminate all relevant knowledge gained from my research to the Greek Accountancy and Bookkeeping Association, of which I am a member. In this way, I could address the accounting community and my professional associates in order to enhance debate on earnings management practices.

Finally, it is equally important to disseminate a sub-set of the knowledge gained from my project to the relevant authorities. Thus, I plan to contact the Federation of European Accountants (FEE) and the European Accounting Board to show them the benefits of reforming annual reports, and I intend to submit a comment letter to the IFRS Board to present my results on the performance of individual standards against earnings management (H1/Test 3).

7.4 Conclusions

In this final chapter, I have reflected on the success of the research and on my learning and professional evolution. It has been a great experience, and may also contribute to accounting science, as I identify several theoretical and practical implications. For example, I have considered contemporary issues such as IFRS 9, on which few studies have previously focused (Onali and Ginesti, 2014), to enhance my analysis of IFRS and US GAAP, contrary to Lin et al. (2013), and have correlated insider trading and earnings management for the first time.

REFERENCES

Abad, C., Laffarga, J., Garcia-Borbolla, A., Larran, M., Pinero, J. and Garrod, N., (2000), "An evaluation of the value-relevance of consolidated versus unconsolidated accounting information: evidence from quoted Spanish firms", *Journal of International Financial Management and Accounting, 11(3), pp.156–77.*

Abarbanell, J., and V. Bernard., (1992), "Test of analysts' overreaction/underreaction to earnings information as an explanation for anomalous stock price behavior", *Journal of Finance 47: pp. 1181-1207.*

Abarbanell, J., Bushee, B., (1998), "Abnormal returns to a fundamental analysis strategy", *The Accounting Review 73: 19-45.*

Aboody, D. Barth, M. and Kasznik, R., (1999), "Revaluations of fixed assets and future company performance: evidence from the UK", *Journal of Accounting and Economics, 26: pp. 149-178.*

Adams, C.A., Weetman, P., Jones, E. A. E. and Gray, S. J., (1999), "Reducing the burden of US GAAP reconciliations by foreign companies listed in the United States: the key question of materiality", *European Accounting Review, 8(1): pp. 1-22.*

Adelman, C., (1993) "Kurt Lewin and the Origins of Action Research", *Educational Action Research, 1:1, pp. 7-24.*

Adiel, R., (1996), "Reinsurance and the Management of Regulatory Ratios and Taxes in the Property-Casualty Insurance Industry", *Journal of Accounting and Economics, 22, pp. 207-240.*

Adrian, T. and Shin, H. S., (2009), "The shadow banking system: implications for financial regulation", *Banque de France Financial Stability Review 13, pp. 1–10.*

Ahmed, A. A., Neel M., and Wang D., (2013), "Does Mandatory Adoption of IFRS Improve Accounting Quality? Preliminary Evidence", *Contemporary Accounting Research, Vol. 30, Issue 4, pp. 1344.*

Ahrens, T. and Chapman, C. S., (2007), "Management Accounting as Practice", *Accounting, Organizations and Society (Vol. 32, No. 1), pp. 1-27.*

Aisbitt, S., (2001), "Measurement of harmony of financial reporting within and between countries: the case of the Nordic countries", *European Accounting Review, 10(1): pp. 51–72.*

Aisbitt S., (2006), "Assessing the Effect of the Transition to IFRS on Equity: The Case of the FTSE 100", *Accounting in Europe, Vol.3, pp. 117-133.*

Alexander, D., (1993), "A European true and fair view", *European Accounting Review, 2 (1), pp. 59-80.*

Alexander, D., and Archer, S., (2000), "On the myth of Anglo-Saxon financial accounting", *The International Journal of Accounting 35, 4, 539-557.*

Ali, A., Hwang, L., (2000), "Country-specific factors related to financial reporting and the value relevance of accounting data" *Journal of Accounting Research 38 (1), pp.1-21.*

Aliaga, M. and Gunderson, B., (2000), "Interactive Statistics", *Saddle River, pp.3-15.*

Allen, F. and Carletti, E., (2010), "An overview of the crisis: causes, consequences and solutions", *Int. Rev. Finance 10 (1), pp.1–26.*

Allison, P., D., (2012), "Logistic Regression Using SAS: Theory and Application", *Second Edition, Cary, NC: SAS Institute Inc.*

Anderson, G., and Herr, K., (1999), "The New Paradigm Wars: Is There Room for Rigorous Practitioner Knowledge in Schools and Universities?", *Educational Researcher, 28(5), pp. 12-21.*

Anderson, T., (2003), "Getting the Mix Right Again: An updated and theoretical rationale for interaction", *Athabasca University - Canada's Open University.*

Arbnor, I., and Bjerke, B., (2009), "Methodology for creating business knowledge", *London : SAGE Publications Ltd.*

Archer, G. S., Delvaille, P. and McLeay, S. J., (1996), "A Statitistical Model of International Accounting Harmonization", *Abacus, 32(1): pp. 1-29.*

Arellano, M. and Bond, S., (1991), "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations", *Oxford Journals, The Review of Economic Studies Vol 58, Issue 2, pp. 277-297.*

Argyrous, G., (2006), "Statistics for research with a guide to SPSS", *2nd Edition, London: SAGE Publications.*

Armstrong, C., Barth E. M. and Jagolinzer, A., (2007), "Market reaction to the Adoption of IFRS in Europe" *Working paper, Stanford University.*

Armstrong, C. S., Barth, M. E., Jagolinzer, A. D. and Riedl, E. J., (2010), " Market Reaction to the Adoption of IFRS in Europe", *The Accounting Review, Vol. 85, Iss. 1, pp. 31-61.*

Ashbaugh, H. and Pincus, M., (2001), "Domestic accounting standards, International Accounting Standards, and the predictability of earnings", *Journal of Accounting Research, 39(3), pp. 417-434.*

Ashbaugh, H., (2001), "Non-U.S. Firms Accounting Standards Choices", *Journal of Accounting and Public Policy 20, pp.129–53.*

Ashbaugh, H. and Olson, P., (2002), "An Exploratory Study of the Valuation Properties of Crosslisted firms' IAS and US GAAP Earnings and Book Values", *The Accounting Review, Vol. 77, pp. 107–127.*

Auer, K. V., (1996), "Capital market reactions to earnings announcements: empirical evidence on the difference in the information content of IAS-based earnings and EC-Directives-based earnings", *European Accounting Review, 5(4), pp. 587-623.*

Auer. K. V, (1999), "Internationale Rechnungslegungsstandards - ein Pladoyer fur Transparcnz undVeirgleichbarkeit", *Zeitschrift fur das gesamte Kreditwesen, 52, pp. 373-379.*

Aubert, F. and Dumontier, P., (2007), "Analyzing analysts' expertise: did analyst fully anticipate the impact of IFRS adoption on earnings? The European evidence", *The European evidence', University of Illinois at Urbana Champaign and University of Geneva.*

Ayers, B. C., (1998), "Deferred Tax Accounting Under SFAS No. 109: An Empirical Investigation of its Incremental Value-Relevance Relative to APB No. 11", *Accounting Review, Volume 73 Issue 2, pp. 195-212.*

Backman, J., (1998), "Rapporter och upssatser" *Studentlittertur Lund, Sweden.*

Baginski, S., Hassell, J. and Kimbrough, M., (2004), "Why Do Managers Explain Their Earnings Forecasts?", *Journal of Accounting Research, 42 (1): pp. 1-28.*

Ball, R., Kothari, S. P. and Robin, A., (2000), "The effect of International Institutional Factors on Properties of Accounting Earnings" *Journal of Accounting and Economics 29: pp. 1-51.*

Ball, R., (2001), "Infrastructure Requirements for an Economically Efficient System of Public Financial Reporting and Disclosure" *in Brookings-Wharton Papers on Financial Services, edited by R. E. Litan and R. Herring, Washington DC: Brookings Institution Press, pp. 127-169.*

Ball, R., Robin, A. and Wu, J., (2003), "Incentives Versus Standards: Properties Of Accounting Income In four East Asian Countries" *Journal of accountings and Economics, 36 (1-3): pp. 235-270.*

Ball, R., (2006), "International financial reporting standards (IFRS): pros and cons for investors", *Accounting and Business Research International Accounting Policy Forum, pp. 5-27.*

Ball, R., Li, X. and Shivakumar, L., (2015), "Contractibility and transparency of financial statement information prepared under IFRS: Evidence from debt contracts around IFRS adoption" *Journal of Accounting Research, 53(5), pp. 915-963.*

Ballas, A.A., Hevas, D. and Neil, D., (1998)., "The state of accounting and the state of the state", *Journal of Management and Governance, Vol. 2, No.3, pp. 267-285.*

Baron, R., M. and Kenny, D., A., (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology.*

Barth, M., E., (1991), "Relative measurement errors among alternative pension asset and liability measures", *The Accounting Review, 66, pp. 433-463.*

Barth, M., E., (1994), "Fair Value Accounting: Evidence from Investment Securities and the Market Valuation of Banks", *Accounting Review, Volume 69 Issue 1, pp. 1-25.*

Barth, M., E., Beaver, W., H. and Landsman, W., R., (1996), "Value-relevance of banks fair value disclosures under SFAS 107", *The Accounting Review 71, pp. 513-537.*

Barth, M., Clinch G., and Shibano, T., (1999), "International accounting harmonization and global equity markets", *Journal of Accounting and Economics 26: pp. 201-235.*

Barth, M., E., Landsman W., R. and Lang, M., (2005), "International Accounting Standards and Accounting Quality", *Working paper, University of North Carolina and Stanford University.*

Barth, M., E., Landsman, W., R., Lang, M., H., and Williams, C., D., (2006), "Are IFRS-based and US GAAP-based accounting amounts comparable?" *Journal of Accounting and Economics, 54(1), pp. 68-93.*

Barth, M., E., Landsman, W., R and Lang, M., (2008), "International accounting standards and accounting quality", *Journal of Accounting Research, Vol. 46 No.3, pp. 467-498.*

Barth, M., E. and Landsman, W. R, (2010), "How did financial reporting contribute to the financial crisis?" *European Accounting Review, 19(3), pp. 399-423.*

Barth, M., Landsman, W., Young D. and Zhuang, Z., (2011), "Relevance of Differences between Net Income based on IFRS and Domestic Standards for European Firms", *Working paper, Stanford University.*

Barth, M., Landsman, W., Lang, M. and Williams, C., (2012), "Are IFRS-based and US GAAP-based Accounting Amounts Comparable?" *Journal of Accounting and Economics, 54 (1): pp. 68-93*

Bartov, E., Gul, F., and Tsui, J., (2001), "Discretionary accruals models and audit qualifications", *Journal of Accounting and Economics, 30, pp. 421-452*

Bartov, E., Givoly, D. and Hayn, C., (2002), "The rewards to meeting or beating earnings expectations", *Journal of Accounting and Economics, 33, pp.173-204.*

Bartov, E., Goldberg, S., and Kim, M., (2004), "Comparative value relevance among German, U.S. and International Accounting Standards: A German stock market perspective", *Working paper, New York University.*

Bartov, E., Goldberg, S. and Kim, M., (2005), "Comparative value relevance among German, U.S. and international accounting standards: a German stock market perspective", *Jaccaud Finance 20(2): pp. 95-119.*

Bartunek, J., and Louis, M., R., (1996), "Insider/outsider team research", *Thousand Oaks, CA: Sage.*

Basilico, E., and Johnsen, T., (2011) "Evidence on the Cross Country Variations in the Mispricing of Accruals Surrounding the Introduction of IFRS in Europe" *Available at SSRN: https://ssrn.com/abstract=1918586.*

Basu, S., (2003), "Why do banks fail?", *International Review of Applied Economics, 17(3), pp. 231-248.*

Beatty, A. L., Chamberlain, S. L., Magliolo, J., (1995), "Managing financial reports of commercial banks: The influence of taxes, regulatory capital and earnings", *Journal of Accounting Research 33, pp. 231-261.*

Beatty, A., Chamberlain, S., and Magliolo, J., (1996), "An Empirical Analysis of the Economic Implications of Fair Value Accounting for Investment Securities." *Journal of Accounting and Economics 22 (1996): pp. 43-77.*

Bayaga, A., (2010), "Multinomial logistic regression: Usage and application in risk Analysis" *Journal of Applied Quantitative Methods, 5(2), pp. 288-297.*

Becker, C. L., DeFond, M. L., Jiambalvo, J. and Subramanyam, K. R., (1998), "The effect of audit quality on earnings management", *Contemporary Accounting Research, 15(1), pp. 1-24.*

Beaver, W. H. and Dukes, R. E., (1972), "Interperiod tax allocation, earnings expectations and the behavior of stock returns", *Accounting Review, pp. 320-332.*

Beck, T., Demirguc-Kunt, A. and Levine, R., (2006), "Bank concentration, competition, and crises: first results", *J. Banking Finance 30 (5), pp. 1581-1603.*

Bell, J., (2005), "Doing your Research Project: a guide for first-time researchers in education and social science", *Buckingham Oxford University Press, 4th Edition.*

Benau G. M. A., (1995), "Armonización de la Información Financiera en Europa. Instituto de Contabilidady Auditoría de Cuentas", *Premio Carlos Cubillo Valverde, ed.1994, Madrid.*

Berger, A., (2010). The development and status of enforcement in the European Union. *Accounting in Europe, 7(1): pp.15-35.*

Bergstresser, D. and Philippon, T., (2006), "CEO incentives and earnings management", *Journal of Financial Economics, 80(3): pp. 511-529*

Beuselinck, C., Joos, P., Khurana, I. K., Van der Meulen, S., (2010), "Mandatory Adoption of IFRS and Analysts' Forecasts Information Properties", *Tilburg University, Center for Economic Research in its series Discussion Paper with number 2010-112.*

Bhattacharya, U. and Daouk, H., (2002), "The world pricing of insider trading", *Journal of Finance Vol. 57: pp. 75-108*

Blackburn, S., (1996), "Oxford dictionary of philosophy", *Oxford University Press, Oxford.*

Biener, H., (1994), "What is the future of mutual recognition of financial statements and is comparability really necessary?", *European Accounting Review, 3(3): pp.335-342.*

Bildersee, J. S., Cheh, J. J., and Lee, C., (1990), "The international price-earnings ratio phenomenon: A partial explanation", *Japan and the World Economy 2(2), 263- 282.*

Black, E., Carnes, T., Jandik, T. and Henderson, C., (2004), "International Accounting Diversity and The Long-Term Success of Cross-Border Mergers", *European Accounting Association, Annual Meeting, Prague, pp.1-3.*

Blaikie, N., (2000), "Designing social research", *Cambridge: Polity.*

Blaxter, L., Hughes, C. and Tight, M., (1996), "How to Research", *Buckingham: Open University.*

Blaxter, L., Hughes, C., and Tight, M., (2001), "How to Research" *Second Edition. Philadelphia: Open University Press.*

Blumberg, B., Cooper, D. R. and Schindler, D. S., (2008), "Business Research Methods", *Maidenhead: McGraw-Hill.*

Bonner, S. E., Hesford, J. W., Van der Stede, W. A. and Young, S. M., (2006), "The most influential journals in academic accounting", *Accounting, Organizations and Society, vol.31, no.7, pp. 663-685.*

Botosan, C. A., Plumlee, M. and Wen, H. J., (2011), "The Relation Between Expected Returns, Realized Returns, and Firm Risk Characteristics" *Contemporary Accounting Research, Forthcoming.*

Bradbury, H., and Reason, P., (2001), "Conclusion: Broadening the bandwidth of validity: Issues and choice-points for improving the quality of action research", *in P. Reason and H. Bradbury (Eds.), "Handbook of action research: Participative inquiry and practice" (pp. 447–455), London: Sage.*

Bradshaw, M.T., Bushee, B.J. and Miller, G.S., (2004), "Accounting Choice, Home Bias, and US Investment in non-US firms", *Journal of Accounting Research, Vol. 42, pp. 795-841.*

Brannick, T. and Coghlan, D., (2007), "In defense of being native the case for insider academic research", *Organizational Research Methods, Vol.10, No.1, pp. 59-74*

Breker. N., Naumann. K. P., and Rielmann, S., (1999), "Der Wirtschaftsprtifer als Begleiter der Internationalisierung der Rechnungsiegung", *Die Wirtschafrsprufung. 52, pp. 140-154, pp. 185-195.*

Briston, R., (1978), "The evolution of accounting in developing countries", *International Journal of Accounting, pp. 105-120.*

Briston, R., (1989), "Wider still and wider: the international expansion of the accounting profession", *Accountant's Magazine, August, pp. 16-17.*

Broomwich, M., (1992), "Financial Reporting, information and Capital Markets", *London, Pitman Publishing.*

Brown, P. and Tarca, A. (2001), "Politics, Processes and the Future of Australian Accounting Standards", *Abacus. Vol. 37 No. 3. pp. 267-296.*

Brown P., Tarca, A., (2005), "A commentary on issues relating to the enforcement of International Financial Reporting Standards in the E.U.". *Eur. Account Rev., 14: pp. 181-212.*

Brown, S., (2008), "US watchdog hears fair value is 'much needed", *Accountancy Age.*

Brown, A., (2016) ,"Institutional Differences and International Private Debt Markets: A Test Using Mandatory IFRS Adoption", *Journal of Accounting Research.*

Brüggemann, U., Hitz, J. and Sellhorn, T., (2013), "Intended and Unintended Consequences of Mandatory IFRS Adoption: A Review of Extant Evidence and Suggestions for Future Research", *European Accounting Review, 22(1): pp. 1-37.*

Bruno, G. S. F., (2005), "Estimation and inference in dynamic unbalanced panel data models with small number of individuals", *Stata Journal, StataCorp LP, vol 5 (4), pp. 473-500.*

Bullough, Jr., R., V., and Pinnegar, S., (2001), "Guidelines for Quality in Autobiographical Forms of Self-Study Research", *Educational Researcher, 30(3), pp. 13-21.*

Burgstahler, D. C. and Dichev, I. D., (1997a), "Earnings Adoption and Equity Value" *The Accounting Review, April 187-215.*

Burgstahler, D. C. and Dichev, I. D., (1997b), "Earnings Management to Avoid Decreases and Losses" *Journal of Accounting and Economics 24: pp. 99-126.*

Burgstahler, D. and Eames, M., (1998), "Management of earnings and analyst forecasts", *working paper, University of Washington, Seattle, WA.*

Burgstahler, D., Hail, L. and Leuz, C., (2004), "The Importance of Reporting Incentives: Earnings Management in European Private and Public Firms", *Financial Institutions Center.*

Burgstahler, D., Hail, L., and Leuz, C., (2006), "The Importance of Reporting Incentives: Earnings Management in European Private and Public Firms", *The Accounting Review, 81, pp. 983.*

Burgstahler, D., Hail, L. and Leuz, C., (2007), "The importance of reporting incentives: earnings management in European private and public firms", *The Accounting Review*.

Burns, R. B., (2000), "Introduction to Research Methods", *Pearson Education Australia Pty Limited, 4th Edition.*

Burrell, G. and Morgan, G., (1979), "Sociological Paradigms and Organisational Analysis", *London: Heinemann.*

Bushman, R., Piotroski, J., Smith, A., (2004), "What determines corporate transparency?" *Journal of Accounting Research 42 (2), pp. 207-252*.

Bushman, R. and Piotroski, J., (2006), "Financial reporting incentives for conservative accounting: The influence of legal and political institutions", *Journal of Accounting and Economics (forthcoming)*

Bushman, R. M., (2014), "Thoughts on financial accounting and the banking industry", *Journal of Accounting and Economics, 58(2), pp. 384-395*.

Byard, D., Li, Y. and Yu, Y., (2011), "The effect of mandatory IFRS adoption on financial analysts' information environment", *Journal of Accounting Research 49, pp. 69-96*.

Cai, L., Rahman, A. and Courtenay, S., (2008), "The effect of IFRS and its Enforcement on Earnings Management: An International Comparison", *Working Paper, Massey University, New Zealand.*

Cairns, D., (1994), "What is the future of mutual recognition of . financial statements and is comparability really necessary", *European Accounting Review, 3(3): pp.343-352.*

Cairns, D., (1997), "The future shape of harmonisation: A reply", *European Accounting Review, 6(2), pp. 305-348.*

Callao, S., Jarne, J. I., and Lainez, J. A., (2007), "Adoption of lFRS in Spain: Effect on the comparability and relevance of financial reporting", *Journal of International Accounting, Auditing and Taxation, 16(2): pp.148-178.*

Campbell, D., T., and Stanley, J., C., (1963), "Experimental and quasi-experimental designs for research', *Dallas: Houghton Mifflin.*

Canibano, L. and Mora, A., (2000), "Evaluating the statistical signi. cance of *de facto* accounting harmonization: a study of European global players", *European Accounting Review,* 9(3): *pp. 349-369*.

Capkun V., D. Collins, and Jeanjean T., (2011), "Does IAS/IFRS adoption Deter Earnings Management", *working paper, SSRN*.

Carr, W. and Kemmis, S, (1986), "Becoming Critical. Education, knowledge andaction research", *Lewes, East Sussex: Deakin University Press.*

Cascino, S., and Gassen, J., (2015), "What drives the comparability effect of mandatory IFRS adoption?" *Review of Accounting Studies, 20 (1). pp. 242-282. ISSN 1380-6653.*

Cazavan-Jeny A., and Jeanjean T., (2007), "Levels of voluntary disclosure in IPO prospectuses: An empirical analysis", *Review of Accounting and Finance, 6(2): pp. 131-149.*

Cecchini, P., (1988), "The European Challenge 1992: The Benefits of a Single Market",*Wildwood House, Aldershot*.

Chandler, R. A., (1992), "The international harmonisation of accounting: in search of influence", *The International Journal of Accounting, Vol. 27, pp. 222-233*.

Chang, M., D'Anna, G., Watson, I. and Wee, M., (2006), "Do investor relations affect information asymmetry? Evidence from Australia" *Available at SSRN: http://ssrn.com/abstract=947191*.

Chauveau B., Deartini P. and Moneva J., (1996), "Usefulness of small business financial reporting in Europe: the case of Spain, France and Italy", *in Joshi P. and Ramadhan S., (2002), "The adoption of international accounting standards by small and closely held companies: evidence from Bahrain", The International Journal of Accounting, 37, pp. 429-440.*

Chen, F., Hope. O. K., Li Q., and Wang X., (2013), "Earnings Opacity and Closed-End Fund Discounts", *Working paper*.

Chen, L. H., and Sami, H., (2013), "The impact of firm characteristics on trading volume reactions to the earnings reconciliation from IFRS to US GAAP", *Contemporary Accounting Research, 30(2), pp. 697-718*.

Chen, L. H., and Khurana, I. K., (2015), "The impact of eliminating the Form 20-F reconciliation on shareholder wealth: Evidence from U.S. cross-listed firms", *The Accounting Review, 90(1), pp.199-228*.

Chen, T., Harford, J. and Lin, C., (2015), "Do Analysts Matter for Governance? Evidence from Natural Experiments", *Journal of Financial Economics 115: pp.383-410.*

Chia, R., (2003), "Organization theory as a postmodern science", *in H. Tsoukas and C. Knudsen (eds) The Oxford Handbook of Organization Theory: Meta-Theoretical Perspectives. Oxford: Oxford University Press, pp. 113–140.*

Chiaramonte, L. and Casu, B., (2017), "Capital and liquidity ratios and financial distress. Evidence from the European banking industry", *The British Accounting Review 49 pp. 138-161.*

Choi, D., S., (1980), Primary–secondary reporting: A cross-cultural analysis', *International Journal of Accounting, 16: pp. 84-104.*

Choi, F. D. S. and Mueller, G, G., (1984), "International Accounting", *NewJersey, USA: Prentice Hall.*

Choi, F., D., S. and Levich, R., M, (1990), "The Capital Market Effects of International Accounting", *Diversity Homewood, Illinois, Dow Jones-Irwin.*

Choi, F. D. S. and Levich, R. M., (1991), "The Capital Market Effects of International Accounting Diversity", *New York: Salomon Brothers Center for the Study of Financial Institutions.*

Choi, F. and Mueller, G., (1992), "International Accounting", *Englewood Cliffs, NJ: Prentice Hall.*

Choi, B., Collins, D. W. and Johnson, W. B., (1997), "Valuation implications of reliability differences: the case of non-pension postretirement obligations", *The Accounting Review 72, pp. 351-383.*

Choi, F., Frost, C. and Meek, G., (1999), "International Accounting", *New Jersey: Prentice-Hall.*

Choi, F., Frost, C. and Meek, G., (2002), "International Accounting", *Englewood Cliffs, NJ: Prentice Hall.*

Choi, F. and Meek, G., (2005), "International Accounting", *5th edn, Upper Saddle River, NJ: Prentice Hall.*

Christensen, H.B., Lee, E., and Walker, M., (2008), "Incentives or Standards: What Determines Accounting Quality Changes Around IFRS Adoption?" *Financial Accounting and Reporting Section (FARS) Paper, the American Accounting Association.*

Christensen, H., Hail L., and Leuz C., (2011), "Capital-market effects of securities regulation: hysteresis, implementation, and enforcement", *Working paper, University of Chicago and University of Pennsylvania.*

Christensen, H., B., Hail, L., Leuz, C., (2013), "Mandatory IFRS reporting and changein enforcement". *Journal of Accounting and Economics, 56, 147-177*. Citron, D. B., (1992), Accounting measurement rules in UK bank loan contracts", *Accounting and Business Research 23 (89): pp, 21-30*.

Chua, Y., Cheong, C., Gould, G., (2012), "The impact of mandatory IFRS adoption on accounting quality: evidence from Australia", *J. Int. Account. Res. 11 (1), pp. 119-146*.

Claessens, S., Pozsar, Z., Ratnovski, L., and Singh, M., (2012), "Shadow Banking: Economics and Policy", *IMF Staff Discussion Note No. 12/12.*

Coghlan, D. and Brannick T., (2005), "Doing action research in your own organization", *2nd edition, London: Sage*.

Coghlan, D. and Brannick, T., (2010), "*Doing action research in your organization", 3nd edition, London: Sage*.

Cohen, L., Manion, L., and Morrison, K., (2000), "Research methods in education", *London: Falmer Press, 5th edition.*

Cohen, L., Manion, L., and Morrison, K., (2011), "Research Methods in Education" *Routledge, 7th Edition.*

Cole, R., (2012), "How did the financial crisis affect small business lending in the United States?" *Technical Report 399, US Small Business Administration.*

Collins, J. H., Shackelford, D.A., and Wahlen, J. M, (1995), "Bank Differences in the Co-ordination of Regulatory Capital, Earnings, and Taxes", *Journal of Accounting Research, Vol. 33, No. 2 Autumn, pp. 263-291*.

Collins, H., (2010), "Creative Research: The Theory and Practice of Research for the Creative Industries", *AVA Publications*.

Comprix, J., Muller, K. and Stanford, M., (2003), "Economic Consequences from Mandatory Adoption of IASB Standards in the European Union", *Working Paper, Arizona State University, Pennsylvania State University and Texas Christian University*.

Connelly, F., M., and Clandinin, D.,J., (1990), "Stories of experience and narrative inquiry" *Educational Researcher, 19 (5), pp. 2-14.*

Co-ordination Group on Audit and Accounting (CGAA) (2003) Final Report to the Secretary for Trade and Industry and the Chancellor of the Exchequer Available at:*http://webarchive.nationalarchives.gov.uk/20060214214419/http://www.dti.gov.uk/cld/cgaai-final.pdf.*

Cordazzo, M., (2008), "The impact of IAS/IFRS on accounting practices: evidences from Italian listed companies", *Congress of European Accounting Association, Rotterdam.*

Cordeiro R., Couto G., Silva F., (2007), "Measuring the Impact of International Financial Reporting Standards (IFRS) in Firm Reporting: The Case of Portugal", *working paper, University of the Azores*.

Cook, A., (1989) "International Business: A Channel for Change in United Kingdom Accounting," In A. Hopwood (ed.), *International Pressure for Accounting Change, pp. 33-42. London, Prentice Hall International.*

Cooper, H. M., (1988), "Organizing knowledge synthesis: A taxonomy of literature reviews" *Knowledge in Society, 1, pp. 104-126.*

Coopers and Lybrand, (1993), "Making a Success of Acquisitions", *Coopers and Lybrand, London.*

Costley, C., and Armsby, P., (2007), "Methodologies for undergraduates doing practitioner investigations at work", *Journal of Workplace Learning, 19,(3), pp. 131-145.*

Coval, J., Jurek, J. and Stafford, E., (2008), "The economics of structured finance", *Harvard Business School Working Paper 09-060.*

Council of the European Communities, (1978), "Fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54 (3) (g) of the Treaty on the annual accounts of certain types of companies.", *Brussels: Document 378L0660, Official Journal L 222, 14/08/1978: 0011-0031.*

Council of the European Communities, (1983), "Seventh Council Directive 83/349/EEC of 13 June 1983 based on the Article 54 (3) (g) of the Treaty on consolidated accounts." *Brussels: Document 383L0349, Official Journal L 193, 18/07/1983: 0001-0017.*

Creswell, J. W., (1994), "Research design: Qualitative and quantitative approaches", *Thousand Oaks, CA: Sage Publications.*

Creswell, J. W., (2003), "Research design: Qualitative and quantitative approaches", *Thousand Oaks, CA: Sage, 2nd Edition.*

Creswell, J. W., (2012), "Educational research: Planning, conducting, and evaluating quantitative and qualitative research", *Boston: Pearson Education, 4th Edition*

Crotty, M., (1998), "The foundations of social research: Meaning and perspective in the research process", *Thousand Oaks, CA: Sage Publications.*

Cuijpers, R. and Buijink, W., (2005), "Voluntary adoption of non-local GAAP in the European Union: A study of determinants and consequences", *European Accounting Review, Vol. 14, Iss. 3, pp. 487-524.*

Dalnial, H., Kamaluddin, A., Sanusi, Z. M. and Khairuddin, K. S., (2014), "Detecting Fraudulent Financial Reporting through Financial Statements Analysis", *Journal of Advance Management Science Vol. 2, No. 1: pp. 17-22.*

Damodaran, A., (1997), "Corporate Finance. Theory and Practice", *John Wiley and Sons, Inc.*

Damodaran, A., (2010), "Applied Corporate Finance", *USA: John Wiley and Sons.*

Dancey, C. P. and Reidy, J., (2008), "Statistics Without Maths for Psychology: Using SPSS for Windows", *Harlow: Prentice Hall, 4th Edition.*

Daske, H., (2006), "Economic benefits of adopting IFRS or US-GAAP - have the expected costs of equity capital really decreased?", *Journal of Business Finance and Accounting, 33, pp.329-373.*

Daske, H., Hail, L., Leuz, C. and Verdi, R. S., (2007), "Adopting a label: heterogeneity in the economic consequences of IFRS adoptions", *Working Paper, University of Pennsylvania and University of Chicago.*

Daske, H., Hail, L., Leuz, C. and Verdi., R. S., (2008), "Mandatory IFRS Reporting Around the World: Early Evidence on the Economic Consequences", *Journal of Accounting Research 46, pp. 1085-1423.*

Davidson, S. and Kohlmeier, J. M. (1966), "A Measure of the Impact of Some Foreign Accounting Principles", *Journal of Accounting Research, 4, 2: pp. 183-212*.

Davis-Friday, P. and Rueschhoff N., (1998), "International Accounting Standards Versus U.S. GAAP: How Do They Compare ?" *Working paper, University of Notre Dame*.

Day, J., F., S. and Taylor, P., J., (1998), "The role of debt contracts in UK corporate governance", *Journal of Management and Governance, 2, pp. 171-190*.

DeAngelo, L., (1981), "Auditor Size and Audit Quality, Journal of Accounting and Economics", *Vol. 3, pp. 183-199*.

DeAngelo, H., DeAngelo, L., and Skinner, D. J., (1992), "Dividends and losses", *Journal of Finance XLVII, pp. 1837-1863.*

Dechow, P., Sloan, R., Sweeney, A., (1995), "Detecting earnings management", *Account. Rev. 70 (2), pp. 193-225.*

Dechow, P. M., and Skinner, D. J., (2000), "Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators." *Accounting Horizons, 14: pp. 235-250*.

Dechow, P., Ge, W. and Schrand, C., (2010), "Understanding earnings quality: A review of the proxies, their determinants and their consequences", *Journal of Accounting and Economics, 50(2-3), pp. 344-401*.

De Fond M., and Jiambalvo, J., (1994), "Debt covenant violation and manipulation of accruals", *Journal of Accounting and Economics 17: pp. 145-176*.

DeFond, M., Park, C., (2001), "The reversal of abnormal accruals and the market valuation of earnings surprises", *Accounting Revue 76 (3), pp. 375-404.*

De Fond, M. L., Hung, M., and Trezevant, R., (2007), "Investor protection and the information content of annual earnings announcements: international evidence", *Journal of Accounting and Economics, 43, pp. 37-67.*

De Fond, M., Hu, X., Hung, M. and Li, S., (2011), "The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability", *Journal of Accounting and Economics, 51(3): pp. 240-258*

De Franco, G. S., Kothari, P., and Rodrigo S. V. (2011). The benefits of financial statement comparability. *Journal of Accounting Research, 49(4): pp. 895-931.*

De Jong, A., Rosellón, C., Miguel, A. and Verwijmeren, P., (2006), "The economic consequences of IFRS: the impact of IAS 32 on preference shares in the Netherlands", *Working Paper, Erasmus Research Institute of Management.*

De Jonghe, O., (2010), "Back to the basics in banking? A micro-analysis of banking system stability", *J. Financial Intermediation 19 (3), pp. 387-417*

De Vaus, D. A., (1986), "Surveys in Social Research", *Unwin Hyman, London.*

Devi, S. S. and Samujh, R. H., (2015), "The Political Economy of Convergence: The Case of IFRS for SMEs", *Australian Accounting Review, 25(2), pp. 124-138.*

Delamont, S., (1992), "Fieldwork in Educational Settings", *London: Falmer.*

Delvaille, P., Ebbers, G. and Saccon, C., (2005), "International Financial Reporting Convergence: Evidence from Three Continental European Countries", *Accounting in Europe, 2, pp. 137-164.*

Denzin, N. K. and Lincoln, Y. S., (2000), "Introduction: The Discipline and Practice of Qualitative Research", *in Handbook of Qualitative Research (pp. 1-29), Thousand Oaks: Sage.*

Denzin, N. K. and Lincoln, Y. S., (2011), "Introduction: The discipline and practice of qualitative research", *in N.K. Denzin and Y.S. Lincoln (eds) The Sage Handbook of Qualitative Research, 4th Edition, London: Sage, pp. 1-19.*

Denzin, N. K. and Lincoln, Y. S., (2012), "Introduction: The discipline and practice of qualitative research", *In Denzin, N. K. and Lincoln, Y. S. (Eds.), The Sage handbook of qualitative research, Thousand Oaks, CA: Sage, pp. 1-32.*

Ding, Y., Hope O. K., Jeanjean T., and. Stolowy H., (2007), "Differences between domestic accounting standards and IAS: Measurement, determinants and implications", *Journal of Accounting and Public Policy 26 (1): pp. 1-38.*

Djankov, S., LaPorta, R., Lopez-de-Silanes, F., and Shleifer, A., (2008), "The law and economics of self-dealing", *Journal of Financial Economics, 88, pp. 430-465.*

Dobija, D. and Klimczak, K. M., (2010), "Development of accounting in Poland: Market efficiency and the value relevance of reported earnings", *The International Journal ofAccounting,45(3), pp. 356-374.*

Dominowski, R. L., (1980), "Research methods**"**, *Prentice Hall PTR.*

Doukas, J., McKnight, P.and Pantzalis, C., (2005), "Security analysis, agency costs and UK firm characteristics", *International Review of Financial Analysis, 14(5): 493-507.*

Doupnik, T. S., and S. B. Salter, (1993), "An Empirical Test of a Judgemental International Classification of Financial Reporting Practices", *Journal of International Business Studies, Vol. 24, No. 1.*

Doupnik, T. and Salter, S., (1995), "External environment, culture, and accounting practice: a preliminary test of a general model of international accounting development", *International Journal of Accounting, 30(3), pp. 189-207.*

Doupnik, T. and Perera, H., (2009), "International Accounting", *2nd ed., McGraw-Hill International.*

Dumontier, P. and Raffournier, B., (2003), "Are IAS more relevant than European domestic GAAPs?", *EIASM Workshop on Implementing IFRS, Brussels, 11-12 September.*

Dunne, M., Pryor, J. and Yates, P., (2005), "Becoming a researcher: A companion to the research process", *Maidenhead, England: Open University Press.*

Dye, R., (1988), "Earnings management in an overlapping generation's model", *Journal of Accounting Research, pp. 195-235*

Dye, R., (2002), "Classifications manipulation and Nash accounting standards", *Journal of Accounting Research, 40(4), pp. 1125-1162.*

Easley, D. and O'Hara M., (2004), "Information and the cost of capital", *Journal of Finance 59, pp. 1553-1583.*

Easterby-Smith, M., Thorpe, R., Jackson, P. and Lowe, A., (2008), "Management Research", *London: SAGE Publications, 3rd Edition.*

Eccher, E., Ramesh, K., and Thiagarajan, R. (1996), "Fair value disclosures by bank holding companies", *Journal of Accounting and Economics 22: 79-117.*

Eccher, E. and P. Healy, (2003), "The Role of International Accounting Standards in Transitional Economies: A Study of the People's Republic of China", *Working paper, Massachusetts Institute of Technology.*

Eddey, P. H. and Taylor, S. L., (1999), "Directors' recommendations on takeover bids and the management of earnings: evidence from Australian takeovers", *Abacus, Vol. 35, pp. 29-45.*

European Commission (EC) (2002), Regulation No 1606/2002 of the European Parliament and Council, Official Journal L 243, 11/09/2002, pp. 1-4.Online available at: *https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:243:0001:0004:EN:PDF*

El-Habil, A., M., (2012), "An application on multinomial logistic regression", *Pakistan Journal of Statistics and Operation Research, 8(2), 271-291.*

El-Gazzar, S., M., Finn, P. M. and Jacob, R., (1999), "An empirical investigation of multinational firms' compliance with International Accounting Standards", *The International Journal of Accounting, 34(2), pp. 239-248.*

Elgers P., T., Pfeiffer R.J. Jr. and Porter, S.L. (2003), "Anticipatory income smoothing: a re-examination", *Journal of Accounting and Economics 35: pp.405-422.*

Eliwa, Y, Haslam,J., Abraham, S., (2016), "The association between earnings quality and the cost of equity capital: Evidence from the UK", *International Review of Financial Analysis, Volume 48, December 2016, pp. 125-139.*

Elliott, J. and Philbrick D., (1990), "Accounting Changes and Earnings Predictability", *The Accounting Review: pp. 157-174.*

Elliott, J., (1991), "Action research for educational change", *Buckingham, UK: Open University Press.*

Ely, C. and Scott, I., (2007), "Essential Study Skills for Nursing", *Elsevier, Edinburgh.*

Emenyonu, E. N., and Gray, S. J., *(1992),* "EC Accounting Harmonisation: An Empirical Study of Measurement Practices in France, Germany and the UK." *Accounting and Business Research* 23 *pp. 49-58*.

Emenyonu, E. N. and Gray, S., (1996), "International accounting harmonisation in major developed stock market countries: an empirical study", *International Journal of Accounting, 31(3), pp. 269-279.*

Epps, R. W. and Oh, J. W., (1997), "Market perception of foreign financial reports: differential earnings response coefficients between US and foreign GAAP". *Journal of International Accounting, Auditing and Taxation 6: pp. 49-74.*

Erickson, M. and Wang, S. (1999), "Earnings management by acquiring firms in stock-for-stock mergers", *Journal of Accounting and Economics, Vol. 27, pp. 149-76.*

Ernstberger, J., Stich, M. and Vogler, O., (2012), "Economic Consequences of Accounting Enforcement Reforms: The Case of Germany", *European Accounting Review, vol. 21, no. 2, pp. 217-251.*

European Commission (EC) (1995) "Accounting Harmonization: A New Strategy vis-à-vis International Harmonization" *Online: http://ec.europa.eu/internal market /accounting/docs/com-95-508/com-95-508_en.pdf.*

European Commission (EC), (2002), "Regulation No 1606/2002 of the European Parliament and Council", *Official Journal L 243, pp. 1-4 . Available on line at :https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri =OJ:L:2002 :243:0001 : 0004:EN:PDF*

Evans T. G. and Taylor. E. M., (1982), "Bottom Line Compliance with the IASC: A Comparative Analysis" *International Journal of Accounting, 18(1): pp.115-128.*

Evans, L. and Nobes, C., (1996), "Some mysteries relating to the prudence principle in the Fourth Directive and in German and British law", *European Accounting Review, 5(2): pp. 361–73*.

Fay, B. and Moon, D. J., (1977), "What Would An Adequate Philosophy of Social Science Look Like?", *Philosophy of the Social Sciences (Vol. 7), pp. 209-227.*

Feltham, J. and Ohlson, J., (1995), "Valuation and clean surplus accounting for operating and financial activities", *Contemporary Accounting Research, 11(2), pp. 689-731*.

Feleaga, L., Dragomir, V. and Feleaga, N., (2010), "National Accounting Culture and the Recognition of Provisions: An Application of the Prudence Principle", *Crises et nouvelles problematiques de la Valeur, Nice, France.*

Ferrer, C., Callao, S., Jarne, J. I., Laínez, J. A.. (2008), "The impact of IFRS on the European financial reporting*", working paper presented at the 31st annual congress of European Accounting Association, Rotterdam*.

Fidrmuc, J. P., Goergen, M. and Rennoboog, L., (2006), "Insider Trading, News Releases and Ownership Concentration", *Journal of Finance 61, pp. 2931-2973.*

Fields, T. D., Lys, T. Z. and Vincent, L., (2001), "Empirical research on accounting choice" *Journal of accounting and economics, 31(1): pp. 255-307.*

Filip, A., Raffournier, B., (2014), "Financial Crisis and Earnings Management: The European Evidence", *The International Journal of Accounting 49, pp. 455-478.*

Florou, A. and Kosi, U., (2015), "Does mandatory IFRS adoption facilitate debt financing?" *Review of Accounting Studies, 20, pp. 1407-1456.*

Flower, J., (1997), "The future shape of harmonisation: the EU versus the IASC versus the SEC", *European Accounting Review, 6(2), pp. 281-303.*

Fontes, A., Rodrigues, L. L. and Craig, R., (2005), "Measuring convergence of national accounting standards with international financial reporting standards", *Accounting Forum, 29(4): pp. 415-436.*

Forschle G., Glaum. M. and Mandler. U., (1998), " Intenationale Rechnungslegung und Kapitalaufnahmeerleichterungsget Meinungwande bei Führungskräften deutscher Unternehmungen", *Der Betrieh. 51, pp. 2281-2288.*

Francis, J. R., Maydew E. L. and Sparks H. C., (1999), "The role of Big Six Auditors in the credible reporting of Accruals", *Auditing: A Journal of practice and Theory, Vol. 18, pp. 17-34.*

Francis, J. and Wang, D., (2007),"The joint effect of investor protection and Big 4 audits on earnings quality around the world", *Contemporary Accounting Research.*

Frank, W. G., (1979), "An empirical analysis of international accounting principles", *Journal of Accounting Research, 17 (2): pp. 593-605.*

Frankel, R. and Li, X., (2004), "Characteristics of a firm's information environment and the information asymmetry between insiders and outsiders", *Journal of Accounting and Economics, 37(2), pp. 229-259.*

Garson, G. D., (2013), "Factor Analysis", *Statistical Associates Publishers.*

Gaver, J., Gaver, K.M. and Austin, J.R., (1995), "Additional evidence on bonus plans and income management", *Journal of Accounting and Economics, Vol. 19, pp. 3-28.*

Gebhardt, W. R., Lee, C. M. C. and Swaminathan, B., (2001), "Toward an Implied Cost of Capital", *Journal of Accounting Research 39, pp. 135-176.*

Gill, J. and Johnson, P., (2002), "Research Methods for Managers", *London: Sage Publications, 3rd Edition.*

Gill, J., and Johnson, P., (2010), "Research Methods For Managers London", *Sage Publications Ltd., 4th Edition.*

Gillespie, D. F., (1994), "Ethical Issues in Research" *Encyclopedia of Social Work 19th Edition, Volume 1, Silver Spring, Maryland: National Association of Social Workers, Inc.: pp. 884-893.*

Giner, B., (1993), "The Spanish accounting framework - some comments", *European Accounting Review, 2(2): pp. 379-86*.

Glaum, M. and Street, D., (2003), "Compliance with the disclosure requirements of Germany's new market: IAS versus U.S. GAAP", *Journal of International Financial Management and Accounting, 14(1), pp. 64-100.*

Gliner, J. A. and Morgan, G. A., (2000), "Research Methods in Applied Settings: An Integrated Approach to Design and Analysis", *Mahwah, N.J: Lawrence Erlbaum*

Goeltz, R., K., (1996), "International accounting harmonisation: the impossible (and unnecessary dream", *in Blake, J. and Hossain, M. (Eds.): Readings in International Accounting, Thompson Business Press, London, UK, pp. 31-35*.

Goldman, E. and Slezak, S. L., (2006), "An equilibrium model of incentive contracts in the presence of information manipulation", *Journal of Financial Economics, 80, pp. 603-626.*

Gordon, T. P. and Porter, J. C., (2009), "Reading and Understanding Academic Research in Accounting: A Guide for Students", *Global Perspectives on Accounting Education (Vol. 6), pp. 25-45.*

Gorton, G., and Metrick, A., (2010), "Regulating the shadow banking system" *Brookings Papers on Economic Activity pp. 261-297.*

Gordon, E. A. and Hsu, H. T., (2014), "Long-lived asset impairments and future operating cash flows under U.S. GAAP and IFRS", *Working paper pp. 204-236.*

Gore, P., Pope, P. F. and Singh, A. K., (2001), "Non-audit services, auditor independence and earnings management", *Working Paper, Lancaster University.*

Gow, I., Larcker, D. and Reiss, P., (2016), "Causal Inference in Accounting Research", *Journal of Accounting Research*.

Graham, C. and Neu. D., (2003), "Accounting for Globalization", *Accounting Forum, Vol.27, No.4, pp.449-471.*

Graham, J., Harvey, C., and Rajgopal, S., (2005), "The economic implications of corporate financial reporting", *Journal of Accounting and Economics, 40*(1-3), *pp. 3-73.*

Graham, C.R., (2006), "Blended learning systems: Definition, current trends, and future directions", *in C.J. Bonk, and C.R. Graham (Eds.) The handbook of blended learning: Global perspectives, local designs (pp. 3-21). San Francisco, CA: Pfeiffer/John Wiley and Sons, Inc.*

Gray, S. J., (1980), "The Impact of International Accounting Differences from a Security-Analysis Perspective: Some European Evidence", *Journal of Accounting Research Spring Vol. 18, No. 1, pp. 64-76.*

Guay, W. and Verrecchia, R., (2006), "Discussion of an economic framework for conservative accounting and Bushman and Piotroski", *Journal of Accounting and Economics*.

Guay, W. and Verrecchia, R., (2007), "Conservative Disclosure", *Working Paper, University of Pennsylvania.*

Guba, E. G., (1990), "The alternative paradigm dialog", *in E G Guba (ed.), The paradigm dialog, Sage, Newbury Park, pp. 17-28.*

Guba, E., G. and Lincoln, Y., S., (1998), "Competing paradigms in qualitative research", *in N K Denzin and Y S Lincoln (eds.), The landscape of qualitative research: theories and issues, Sage, Thousand Oaks, pp. 195-220.*

Guenther, D., Young, D., (2000), "The Association between financial accounting measures and real economic activity: a multinational study", *Journal of Accounting and Economics 29, pp.53-72.*

Gulhan Suadiye, (2017), "Does mandatory IFRS adoption improve financial reporting quality? Empirical evidence from an emerging economy" *European Journal of Business and Social Sciences, Vol. 6, No. 05.*

Hail, L., Leuz, C. and Wysocki, P., (2010), "Global accounting convergence and the potential adoption of IFRS 42 by the US (Part I): Conceptual underpinnings and economic analysis", *Account. Horiz. 24(3), pp. 355-394*.

Haller, A., (1992), "The relationship of financial and tax accounting in Germany: a major reason for accounting disharmony in Europe", *The International Journal of Accounting, 27(4), pp. 310-323.*

Haller, A., Walton, P., (2000), "Unternehmenspublizität im Spannungsfeld nationalerPrägung und internationaler Harmonisierung", *in Haller, A., Raffournier, B. and Walton, P. (eds) Unternehmenspublizität im internationalen Wettbewerb Stuttgart:Schäffer Poeschel Verlag, pp. 4-72.*

Haller, Axel, (2002), "Financial Accounting Developments in the European Union: Past Events and Future Prospects", *The European Accounting Review, 11 (1): pp. 153-190.*

Hambrick, D., (2007), "Upper echelon theory: revisited", *Academy of Management Review, 32(2),-343.*

Han, J., C., Y., and Wang, S, W., (1998), "Political costs and earnings management of oil companies during the 1990 Persian Gulf crisis", *The Accounting Review, Vol. 73, pp. 103-117.*

Han, F. and He, H., (2013), "Cost of equity capital of foreign firms", *Review of Accounting and Finance, 12 (3), pp. 268-285.*

Hand, J., R., and Skantz, T., R., (1998), "The economic determinants of accounting choices: The unique case of equity carve-outs under SAB 51", *Journal of Accounting and Economics, 24, pp. 175-203.*

Hansen, B., Pownall, G., Prakash, R. and Vulcheva M., (2012), "Relaxing the reconciliation requirement in non-U.S. firms' SEC filings: Firm incentives, and changes in earnings informativeness", *Working Paper, Virginia Tech University.*

Harris, T., and Ohlson, J., (1987), "Accounting Disclosures and the Market's Valuation of Oiland Gas Properties", *The Accounting Review, 62(4).*

Harris, T., S., Lang, M., and Moller, H., P., (1994), "The value relevance of German accounting measures: an empirical analysis", *Journal of Accounting Research, 32(2), pp. 187-209.*

Harris, M., and K. Muller, (1999), "The Market Valuation of IAS Versus US GAAP Accounting Measures Using Form 20-F Reconciliations", *Journal of Accounting and Economics 26, pp. 285-312.*

Harris, M., Opp, C., C., and Opp, M. M., (2014), "Higher capital requirements, safer banks? Macro prudential regulation in a competitive financial system", *Berkeley (Haas): University of California.*

Hatherly, D. and Kretzschmar, G., (2011), "Capital and income financialization: Accounting for the 2008 financial crisis", *Accounting Forum, 35(4), pp. 209–216.*

Haw, I., Hu B., Hwang, L. and Wu, W., (2004), "Ultimate ownership, income management, and legal and extra-legal institutions", *Journal of Accounting Research, 42(2), pp. 423-62*

Hay, C., (2002), "Political analysis: a critical introduction", *Basingstoke: Palgrave. Healy, P. and Wahlen, J., (1999), A review of the earnings management literature and its implications for standard setting", Accounting Horizons, 13(December), pp. 365-383.*

Heilpern, E., Haslam, C. and Andersson, T., (2009), "When it comes to the crunch: What are the drivers of the US banking crisis?" *Accounting Forum, 33(2), pp. 99-113.*

Heitink, G., (1999), "Practical Theology: History, Theory, Action Domains: Manual for Practical Theology" *Grand Rapids, MI: Wm. B. Eerdmans Publishing, pp. 233.*

Hellman, N., (2008), "Accounting conservatism under IFRS", *Accounting in Europe, 5 (1-2), pp. 71-100.*

Henry, E., Lin S.W. and Yang, Y., (2007), "The European-US GAAP Gap: Amount, Type, Homogeneity, and Value-Relevance of IFRS to US GAAP: From 20-F Reconciliations", *SSRN Working Paper.*

Heron, J., (1996), "Co-operative Inquiry: Research into the human condition" *London: Sage Publications.*

Herr, K. and Anderson, G., (2005), "The action research dissertation: A guide for students and faculty", *London: Sage*.

Hietala, P. and Keloharju, M., (1995), "The ex-dividend day behavior of Finnish restricted and unrestricted shares", *Applied Economics Letters, 2: pp. 467-468.*

Hill, C. W. L., (2005), "International Business", *New York: McGraw-Hill/Irwin*.

Hines, R., (1988), "Financial Accounting: In Communicating Reality, We Construct Reality", *Accounting, Organizations and Society, Vol. 13, No. 3, pp. 251-261.*

Hinks, G., (2008), "SEC continues fair value investigation", *Accountancy Age.*

Hoarau, C., (1995), "International accounting harmonization – American hegemony or mutual recognition with benchmarks?", European *Accounting Review, 4(2): pp.217-233.*

Holmes, S., Hodgson, A. and Nevell, P., (1991), "Accounting students handbook", *Harcourt Brace Jovanovich, Sydney.*

Holthausen. R.W., Larcker, D.F., and Sloan, R.G. (1995), "Annual bonus schemes and the manipulation of earnings", *Journal of Accounting and Economics 19 (February): pp. 29-74.*

Hong P., K., Gyung Paik, D., Van Der Laan Smith, J., (2018),"A study of long-lived asset impairment under U.S. GAAP and IFRS within the U.S. institutional environment", *Journal of International Accounting, Auditing and Taxation 31 pp. 74-89.*

Hoogendoorn, M., (1996), "Accounting and taxation in Europe a comparative overview", *European Accounting Review, 5(Suppl.), pp. 783-794.*

Hoogendoorn, M., (2006), "International Accounting Regulation and IFRS Implementation in Europe and Beyond – Experiences with First-time Adoption in Europe", *Accounting in Europe, 3:1, pp. 23-26.*

Hope, O., Jin, J. and Kang, T., (2006), "Empirical evidence on jurisdictions that adopt IFRS", *Journal of International Accounting Research, 5(2), pp. 1-20.*

Horton J., Serafeim G., (2006), "Market response to and the value relevance of reconciliation adjustments from UK GAAP to IFRS GAAP: first evidence from the UK", *available at http://ssrn.com/abstract=923582.*

Horton, J., Serafeim, G. and Serafeim, I., (2013), "Does Mandatory IFRS Adoption Improve the Information Environment", *Contemp. Account. Res. 30(1), pp. 388-423*.

Horvath. P. and Arnaout. A., (1997), "Internationale Rechnugslegung und Einheit des Rechnungwesens", *Controling, 9. pp. 254-269.*

Houston M., Reinstein A., (2001), "International Accounting Standards and their Implication for Accountants and U.S. Statement User", *Review of Business, Vol. 22, Nos. 1-2, pp.75-80.*

Houqe, N. Van Zijl, T. Dunstan, K. and Karim, W., (2012), "The Effect of IFRS Adoption and Investor Protection on Earnings Quality Around the World", *The International Journal of Accounting, 47: pp. 333-355.*

Houqe, M., N., Monem, R.M., Tareq, M., Zijla, T., (2016), "Secrecy and the impact of mandatory IFRS adoption on earnings quality in Europe", *Pacific-Basin Finance Journal 40 (2016), pp.476-490.*

Huddart, S., Hughes, J. and Brunnermeier, M., (1999), "Disclosure requirements and stock exchange listing choice in an international context", *Journal of Accounting and Economics 26, pp. 237-269*

Hughes, J., (2009), "Is this a case of shooting the messenger?", *Financial Times*Hussey, J. and Hussey, R., (1997), "Business research: a practical guide for undergraduate and postgraduate students", *Basingstoke: Macmillan*.

Hung, M., (2000), "Accounting standards and value relevance of financial statements: An international analysis", *Journal of Accounting and Economics, 30(3), pp. 401-420.*

Hung, M., (2001) "Accounting Standards and Value Relevance of Financial Statements: An International Analysis." *Journal of Accounting and Economics 30: pp. 401-4 20.*

Hung, M. and K.R. Subramanyam, (2004), "Financial Statement Effects of Adopting International Accounting Standards: The Case of Germany", *Working paper, University of Southern California.*

Hung, M. and Subramanyam, K. R., (2007), "Financial statements effects of adopting international accounting standards: The case of Germany", *Review of Accounting Studies, Vol. 12, Iss. 4, pp. 623-657.*

Iatridis, G., (2008), "Accounting disclosure and firms' financial attributes; evidence from the UK stock market", *International Review of Financial Analysis, 17(2), pp. 219-241.*

Iatridis, G., (2010), "IFRS Adoption and Financial Statement Effects: The UK Case", *International Research Journal of Finance and Economics, Vol. 38, pp. 165-172.*

International Accounting Standards Board (IASB) (2006), "Preliminary Views on an Improved Conceptual Framework for Financial Reporting", Discussion Paper, IASB, London.

Isidro, H., Nanda, D. and Wysocki, P., (2015), "What Matters in International Accounting Quality Research?", *Working paper, University of Miami.*

Ismail, W.A.W., Kamarudin, K.A., Zijl, T. and Dunstan, K., (2013)," Earnings quality and the adoption of IFRS based Accounting Standards: Evidence from an emerging Market", *Asian Review of Accounting, 21(1), pp. 53-73.*

Jackson, P., (2013), "Shadow banking and new lending channels, past and future", *The European Money and Finance Forum, Vienna, pp. 377-414.*

Jackson, H. E., and Roe, M. J., (2009), "Public and private enforcement of securities laws: Resource based evidence", *Harvard Law School*.

Jaruga, A., Walinska, E. and Bankiewich, A., (1996), "The relationship between accounting and taxation in Poland", *European Accounting Review, 5, pp. 883–897.*

Jeanjean, T., and Stolowy, H., 2008, "Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption", *Journal of Accounting and Public Policy, 19, 6, 27, pp. 480-494.*

Jermakowicz K. E., (2004), "Effects of Adoption of International Financial Reporting Standards in Belgium: The Evidence from BEL-20 Companies" *Accounting in Europe, Vol.1.*

Jermakowicz, E. and Gornik-Tomaszewski, S., (2006), "Implementing IFRS from the perspective of EU publicly traded companies" *Journal of International Accounting 15, pp. 170-196.*

Jermakowicz, E. K., Prather-Kinsey, J. and Wulf, I., (2007), "The Value Relevance of Accounting Income Reported by DAX 30 German Companies", *Journal of International Financial Management and Accounting, 18(3): pp. 151-191.*

Jeter, D.C. and Shivakumar, L., (1999), "Cross-sectional estimation of abnormal accrual models using quarterly and annual data: effectiveness in detecting event specific earnings management", *Accounting and Business Research, 29: pp. 299-319.*

Jiang, J., Petroni, K. R. and Wang, I. Y., (2010), "Did eliminating the 20-F reconciliation between IFRS and US GAAP matter?", *Working Paper, Michigan State University.*

Jiraporn, P., Kim, Y. and Mathur, I., (2008), "Does corporate diversification exacerbate or mitigate earnings management? An empirical analysis", *International Review of Financial Analysis, 17(5), pp. 1087-1109.*

Johnson, P. and Duberly, J., (2003), "Understanding Management Research: An Introduction to Epistemology", *London: Sage Publications.*

Johnson, P. and Clark, M., (2006) "Editors' introduction: Mapping the terrain: An overview of business and management research methodologies", *in P. Johnson and M. Clark (eds.) Business and Management Research Methodologies, Sage, London, pp. xxv - lv.*

Johnson, S., (2008), "Is the Fair-value Fix Stalled?" *CFO Magazine.*

Jones, J., (1991), "Earnings management during import relief investigations" *Journal of Accounting Research, 29, pp. 193-228.*

Jones, M., J. and Oldroyd, D., (2009), "Editorial, financial accounting: past, present and future", *Accounting Forum, Vol. 33, No. 1, pp.1-10.*

Joos, P., and Lang, M., (1994), "The effects of accounting diversity: Evidence from the European Union", *Journal of Accounting Research, 32, pp. 141-168.*

Kagermann. H., (1999), "Umstellung auf intenationale Standards in der Rechnungslegung bei der SAP AG", *in küting, K and Langenbuscher, G. (Eds). Internationale Rechnungslegung, Stuttgard: Schaeffer-Poeschel, pp. 343-358.*

Karampinis, N. and Hevas, D. L., (2011), "Mandating IFRS in an unfavorable environment: The Greek experience", *The International Journal of Accounting, Vol. 46, pp. 304-332.*

Kasznik, R., (1999), "On the association between voluntary disclosure and earnings management", *Journal of Accounting Research, Vol. 37, pp. 57-81.*

Kervin , J. B., (1999), "Methods of Business Research", *2nd Edition , New York : HarperCollins*

Ketokivi, M. and Mantere, S., (2010), "Two strategies for inductive reasoning in organizational research", *Academy of Management Review, Vol. 35, No. 2, pp. 315-333.*

Khan, S., Anderson, M, C. and Warsame, H. A. and Wright, M., (2017), "IFRS Adoption and Liquidity: A Comparative Analysis of Canada with Australia and the United Kingdom", *Canadian Academic Accounting Association (CAAA) Annual Conference.*

Khanagha. J. B., (2011), "Value Relevance of Accounting Information in the United Arab Emirates", *International Journal of Economics and Financial Issues, Vol. 1, pp.33-45.*

Kilduff, M. and Mehra, A., (1997), "Postmodernism and organizational research", *The Academy of Management Review, Vol. 22, pp. 453-81.*

Kim, Y., Li, H., and Li, S., (2012), "Does eliminating the Form 20-F reconciliation from IFRS to U.S. GAAP have capital market consequences?" *Journal of Accounting and Economics, 53(1/2), pp. 249-250*

Kinserdal, A., (1995), "Norway – individual accounts" *D. Ordelheide and KPMG, Transnational Accounting London: Macmillan.*

Kirk, N. E., (2001), "True and Fair View' versus 'Presented Fairly in Conformity with Generally Accepted Accounting Principles", *Working Paper, Massey University.*

Kiviet, J. F., (1995), "On bias, inconsistency, and efficiency of various estimators in dynamic panel data models", *Journal of Econometrics 68, pp. 53-78.*

Kofman, P., and Martens, M., (1997), "Interaction between stock markets: an analysis of the common trading hours at the London and New York stock exchange", *Journal of International Money and Finance, 16(3): pp. 387-414.*

Kosmala-MacLullich, K., (2003), "The true and fair view construct in the context of the Polish transition economy: some local insights", *European Accounting Review, 12(3), pp. 465-488.*

Kothari, S., and Zimmerman, J., (1995), "Price and return models", *Journal of Accounting and Economics 20, pp.155-192.*

Kothari, S., 2001, "Capital markets research in accounting", *Journal of Accounting and Economics 31, pp.105-231*

Kothari, S., Leone, A. and Wasley, C., (2004), "Performance matched discretionary accrual measures", *Journal of Accounting and Economics, 39, pp.163–197.*

Koumanakos, E., Siriopoulos, C. and Georgopoulos, A., (2005), "Firm acquisition and Earnings Management: Evidence from Greece" *Managerial Auditing Journal Vol.20, No.7 pp. 663-678.*

Kousenidis, D. V., Ladas, A. C. and Negakis, C. I., (2013), "The effects of the European debt crisis on earnings quality", *International Review of Financial Analysis, 30, pp.351-362*.

Krebs, C. J., (1972), "Ecology: The experimental analysis of distribution and abundance", *Harper and Row, New York.*

Krzywda, D., Bailey, D. and Schroeder, M., (1995), "A theory of European accountingdevelopment applied to accounting change in contemporary Poland", *European Accounting Review, 4(4), pp. 625-655*.

Kubin, K. W., (I998), "Der Aktionär als Aktienkunde - Annierkungen zum ShareholderValue, zur Wiedervereinigung der internen und externen Rechnungslegung undzur globalen Verbessrung der Berichtserstattung" *in Moller. H. P. and Schmidt, F .(Eds) Rechnungwesen als Istrument für Führungsentscheidungen , Stuttgard: Schaeffer - Poeschel, pp. 525-558.*

Kwan, S. H., (2003), "Operating performance of banks among Asian economies: An international and time series comparison", *Journal of Banking and Finance, 27, pp. 471-489.*

Laird, N. M, and Ware, J. H., (1982), "Random-effects models for longitudinal data", *Biometrics, 38(4): pp. 963-974.*

Lakonishok, J. and Lee, I., (2001), "Are Insider Trades Informative?", *Review of Financial Studies 14, pp. 79-111.*

Lamb, M., Nobes C., and Roberts A., (1998), "International variations in the connections between tax and financial reporting", *Accounting and Business Research, Summer, pp. 173-188.*

Lambert, R., A., Leuz, C., and Verrecchia, R.,E., (2007), "Accounting Information, Disclosure, and the Cost of Capital", *Journal of Accounting Research* 45, 385-420.

Land, J., and Lang, M., (2002), "Empirical Evidence on the Evolution of International Earnings" *The accounting Review 77, pp.115-134.*

Lang, M., H. and Lundholm, R., J., (1996,) "Corporate disclosure policy and analyst behaviour", *The Accounting Review, 71(4), pp. 467-492*.

Lang, M., Raedy, J. and Yetman,M., (2003), "How Representative are Firms that are Cross Listed in the United States? An analysis of Accounting Quality" *Journal of Accounting Research 41, pp. 393-386.*

Lang, M., Ready, J. and Wilson, W., (2005), "Earnings Management and Cross Listing: Are Reconciled Earnings Comparable to US Earnings?" *Working Paper, university of North Carolina.*

Lang, M., Raedy, J., Wilson, W., (2006), "Earnings management and cross listing: Are reconciled earnings comparable to US earnings?" *J. Account. Econ. 42, pp.255-283.*

Lang, M., Maffett, M., and Owens, E., (2010), "Earnings comovement and accounting comparability: The effects of mandatory IFRS adoption", *Working paper, University of North Carolina.*

La Porta, R., Lopez de Silanes, F., Shleifer, A. and Vishny, R., (1997), "Legal determinants of external finance", *The Journal of Finance, 52*(3*), pp. 1131-1150.*

La Porta, R., Lopez-deSilanes, F., Shleifer, A., and Vishny, R., (1999), "The quality of government", *Journal of Law, Economics and Organization 15 (1): pp. 222-279.*

La Porta, R., Lopez-de-Silanes, F., and Shleifer,A., (2006), "What works in securities laws?" *Journal of Finance 61, pp. 1-32.*

Larcker D., and Richardson, S., (2004), "Fees paid to audit firms, accrual choices, and corporate governance", *Journal of Accounting Research, 42 (5): 625-658.*

Larson, R. K. and Street, D. L., (2004), "Convergence with IFRS in an expanding Europe: progress and obstacles identified by large accounting firms' survey", *Journal of International Accounting, Auditing and Taxation, Vol. 13, Iss. 2, pp. 89-119.*

Lasmin, L., (2011), "Empirical evidence on formal and material harmonization of national accounting standards". *Journal of International Business Research, 10(2), pp. 69.*

Laux, C. and Leuz, C., (2009), "The Crisis of Fair Value Accounting: Making Sense of the Recent De-bate", *Accounting, Organizations and Society, Vol. 34, No. 6-7, pp. 826-834.*

Laux, C. and Leuz, C., (2010), "Did fair-value accounting contribute to the financial crisis? Journal of Economic Perspectives", *Journal of Accounting Research 24(1), pp. 93-118.*

Lehman, D., R., (1989), "Market Research and analysis", *Third Edition, Homewood: Irwin.*

Leuz, C. and Verrecchia, R. E., (2000), "The Economic Consequences of Increased Disclosure" *Journal of Accounting Research 38, pp. 91-124.*

Leuz, C., (2003), "IAS versus US GAAP: Information Asymmetry-based Evidence from Germany's New Market", *Journal of Accounting Research, 41 (3): pp. 445-472.*

Leuz, C., Nanda, D. and Wysocki, P., (2003), "Earnings Management and Investor Protection: An International Comparison" *Journal of Financial Economics 69: pp. 505-527.*

Leuz, C. and Wüstemann, J., (2004), "The role of accounting in the German financial system. The german financial system J. Krahnen and R. H. Schmidt", *Oxford University Press.*

Leuz, C., (2006), "Cross Listing, Bonding and Firms' Reporting Incentives: A Discussion of Lang, Raedy and Wilson", *Journal of Accounting and Economics 42, pp. 285-299.*

Leuz, C., (2010), "Different approaches to corporate reporting regulation: How jurisdictions differ and why", *Accounting and Business Research, 40(3): pp. 229-256.*

Leuz, C. and Wysocki, P., (2016), "The economics of disclosure and financial reporting regulation: Evidence and suggestions for Future Research", *Journal of Accounting Research 54, pp. 525-622.*

Levene, H., (1960), "Robust testes for equality of variances. In Contributions to Probability and Statistics", *I. Olkin, ed., Stanford University Press, Palo Alto, CA.*

Leventis, S. and Caramanis, V. C., (2005), "Determinants of audit time as a proxy of audit quality", *Managerial Auditing Journal, 20(5): pp. 460-478.*

Leventis, S., Weetman, P. and Caramanis, V. C., (2005), "Determinants of audit report lag: some evidence from the Athens Stock Exchange", *International Journal of Auditing, 9: pp. 45-58.*

Lewin, K., (1948), "Action research and minority problems", *in G.W. Lewin (Ed.) Resolving Social Conflicts. New York: Harper and Row.*

Lewis, M. K., (2009), "The origins of the sub-prime crisis: Inappropriate policies, regulations, or both?", *Accounting Forum, 33(2), pp. 114-126.*

Li, S., (2010), "Does mandatory adoption of International Financial Reporting Standards in the European Union reduce the cost of equity capital ? ", *Accounting Review, 85(2), pp. 607-636.*

Liang, J. and Bentler, P. M, (2004), "An EM Algorithm for Fitting Two-Level Structural Equation Model", *Phychometrika 69(1): pp. 101-122.*

Liener, G., (1992), "Internationale Unternehmen brauchen eine globalisierte Rechnungs-legung'", *Zeitschrift für Betriebswirtschaft, 62: pp. 269-292.*

Lin, J. W., Li, J. F., and Yang, J. S., (2006), "The effect of audit committee performance on earnings quality", *Managerial Auditing Journal, 21(9), pp. 921-933.*

Lin, H., and Paananen, M., (2006), "The effect of financial systems on earnings management among firms reporting under IFRS", *Business School Working Papers UHBS 2006-2.*

Lin, L., Morris, R., Kang, H., and Tang, Q., (2013), "Information asymmetry of fair value accounting during the global financial crisis", *Journal of Contemporary Accounting and Economics (A), 9 (2), pp. 221-236.*

Lincoln, Y., and Guba, E., (1985), "Naturalistic Inquiry", *Beverly Hills, CA: Sage Publications, Inc.*

Liu, C., Ryan, S., Wahlen, J., (1997), "Differential valuation implications of loan lossprovisions across banks and fiscal quarters", *Accounting Review 72, pp. 133-146.*

Longford, N. T. and Muthen, B., (1992), "Factor analysis for clustered observations", *Phychometrika 57: pp. 581-597.*

Lopez, J. L., (2000), "Accounting and financial audit harmonization in the European Union", *European Accounting Review, 9(4): pp.643-654.*

Loudermilk, M. S., (2007)**,** "Estimation of Fractional Dependent Variables in Dynamic Panel Data Models With an Application to Firm Dividend Policy", *Journal of Business and Economic Statistics, vol. 25, pages pp. 462-472.*

Louis, H., (2004), "Earnings management and the market performance of acquiring firms", *Journal of Financial Economics, Vol. 74, pp. 121-48.*

McEnroe, J. E. and Martens, S. C., (1998), "Individual investors' perceptions regarding the meaning of US and UK audit report terminology: Present fairly in conformity with GAAP and give a true and fair view", *Journal of Business Finance and Accounting, 25(3/4), pp. 289-307.*

MacMahon, R., (2001), "Business growth and performance and the financial reporting practices of Australian Manufacturing SMs", *Journal of Small Business Management, vol.139(2), pp.12-164.*

McMillan, J. H., and Wergin, J.F., (1998), "Understanding and evaluating educational research", *Upper Saddle River, N.J.: Merrill.*

McMillan, J.H., and Schumacher, S., (2006), "Research in education: Evidence based inquiry", *Boston: Pearson Education, 6th Edition*

McNamara, J. F., (1994), "Surveys and experiments in education research", *Lancaster, PA: Technomic Publishing Company, Inc.*

McNeill, P., and Chapman, S., (2005), "Research methods", *Routledge, 3rd Edition.*

McNichols, M., (2000), "Research design issues in earnings management studies", *Journal of Accounting and Public Policy, 19(4/5), pp. 313-345.*

McNiff, J., Lomax, P., and Whitehead, J., (1996), "You and your action research project", *Routledge, New York.*

McNiff, S., (1998), "Art-based research". *London, United Kingdom: Jessica Kingsley Publishers.*

McNiff, J., and Whitehead, J., (2002), "Action research: Principles and practice" *London: Routledge, 2nd Edition*

Mallet, R., (2008), "Making sense of the credit crunch fair value debate", *Chartered Institute of Management Accountants (CIMA).*

Mandler, U., (1996), 'Harmonisierung der Rechnungslegung: bridging the GAAP?', *Zeitschrift für Betriebswirtschaft, 66: pp. 715–734.*

Mankin, J.A., Jewell, J.J, and Rivas, J.A. (2017), "To Improve Financial Reporting, We Need to Disclose More Relevant Information", *International Journal of the Academic Business World, 11(2), 93-100*

Mantzari, E., Sigalasb, C., Hines, T., (2017), "Adoption of the International Financial Reporting Standards by Greek non-listed companies: The role of coercive and hegemonic pressures", *Accounting Forum 41, pp. 185-205.*

Mason, A., (1978), "The Development of International Financial Reporting Standards", *International Centre for Research in Accounting: University of Lancaster*.

Matveev, A. V., (2002), "The advantages of employing quantitative and qualitative methods in intercultural research: practical implications from the study of the perceptions of intercultural communication competence by American and Russian managers" *in Collected research articles, Bulletin of Russian Communication Association* "Theory of communication and applied communication", *Edited by I.N. Rozina, Issue 1, pp. 59-67.*

Maydew, E. L., (1997), "Tax-induced earnings management by firms with net operating losses", *Journal of Accounting Research, Vol. 35, pp. 83-96*.

Maykut, P. and Morehouse, R., (1994), "Beginning qualitative research: A philosophic and practical guide", *London: Falmer Press.*

Mediratta, A. and Jain, S., (2007), "Evaluating the impact of increased transparency in the narrative section of a company's annual report on its internal functioning and its investor relations" *MBA project report, London business school.*

Megginson, W., (1997), "Corporate Finance Theory", *Addison-Wesley Educational Publishers Inc.*

Merthens, D., (2010), "Research and evaluation in education and psychology", *Thousand Oaks, CA: Sage, 3rd Edition.*

Miller, Gregory S. and Douglas J. Skinner, (1998), "Determinants of the valuation allowances for deferred tax assets under SFAS No. 109", *The Accounting Review, Vol. 73, No. 2, pp. 213-233.*

Moir, L., (2001), "Financial covenants in UK private loan agreements – current evidence", *Unpublished working paper, University of Cranfield.*

Morgan, G., (1988), "Accounting as a Reality Construction: Towards a New Epistemology for Accounting Practice", *Accounting, Organizations and Society, Vol. 13, No. 5, pp. 477-485.*

Morris, C., (2003), "Quantitative Approaches in Business Studies", *Harlow: Financial Times Prentice Hall, 6th Edition.*

Mouton, J., (1996), "Understanding social research", *Pretoria: Van Schaik.*

Mueller, G., (1967), "International Accounting", *The International Executive, 9(4), pp. 1-2.*

Mulford, C. W. and Comiskey, E. E., (2002), "The Financial Numbers Game, Detecting Creative Accounting Practices" *Canada: John Wiley and Sons. Inc.*

Murphy, A., B., (1999), "Firm characteristics of Swiss companies that utilize International Accounting Standards", *International Journal of Accounting, 35(1), pp. 121-131.*

Murphy, A., B., (2000), "The impact of adopting IAS on the harmonization of accounting practices", *International Journal of Accounting, 35(4), pp. 471-493.*

Myers, L., A and Skinner D., J., (2002), "Earnings Momentum and Earnings Management" *Working paper, University of Michigan.*

Myers, M., D., (2009), "Qualitative Research in Business and Management", *Sage, London.*

Nabar, S., and Boonlert-U-Thai, K., K., (2007), "Earnings Management, Investor Protection, and National Culture", *Journal of International Accounting Research: Fall, Vol. 6, No. 2, pp. 35-54.*

Nair, R., D and Frank, W., G., (1980), "The Impact of Disclosure and Measurement Practices on International Accounting Classifications," *The Accounting Review, July, pp.426-450.*

Nair, R., D. and Frank, W., G., (1981), "The Harmonization of International Accounting Standards, 1973-1979", *International Journal of Accounting Education and Research, pp 61-77.*

Neal A., Tang Q., Lin Z., (2015), "Corporate accruals quality during the 2008–2010 Global Financial Crisis". *Journal of International Accounting, Auditing and Taxation, 25, pp. 1-15.*

Negakis, C., I., (2013), "The Explanatory Power of Earnings for Stock Returns in the pre-and post-IFRS Era: Some Evidence from Greece", *Managerial Finance, 39(9), 2-2.*

Nelson, K., K., (1996), "Fair Value Accounting for Commercial Banks: An Empirical Analysis of SFAS No. 107", *Accounting Review, Volume 71 Issue 2, pp. 161-182.*

Neuman, W., L. and Robson, K., (2004), "Basics of Social Research: Qualitative and Quantitative Approaches", *Pearson Education Canada.*

Newman, I. and Benz, C. R., (1998), "Qualitative-quantitative research methodology: Exploring the interactive continuum", *Carbondale, IL: Southern Illinois University Press.*

Nickell, S., J., (1981), "Biases in Dynamic Models with Fixed Effects", *Econometrica Vol 4, No 6, pp. 1417 -1426.*

Niehus, R., J. and Thyll, A., (2000), "Kozernabschluss nach US-GAAP: Grundlagen und Gegenuberstellung mit den deutschen Vorschriften" *,Stuttgard: Schäeffer - Poeschel.*

Nieschwietz, R. J., Schultz Jr., J. J. and Zimbelman, M. F., (2000), "Empirical research on external auditors' detection of financial statement fraud", *Journal of Accounting Literature, Vol.19, pp. 190-246.*

Niskanen, J., Kinnunen, J. and Kasanen, E., (1998), "A note on the information content of parent company versus consolidated earnings in Finland", *European Accounting Review, 7(1), pp. 31-40.*

Niskanen, J., Kinnunen, J. and Kasanen, E., (2000), "The value relevance of IASreconciliation components: empirical evidence from Finland", *Journal of Accounting and Public Policy, 19(2): pp. 119-137*.

Nobes, C.,W., (1981), "An Empirical Analysis of International Accounting Principles: A Comment", *Journal of Accounting Research.*

Nobes, C., (1983), "A judgmental international classification of financial reporting practices", *Journal of Business Finance and Accounting, 10, pp. 1-19.*

Nobes, C., (1986), "Financial Reporting in the UK and the EEC: Mutual Influence", *London: Certified Accountants Publications*.

Nobes, C. W. and Parker, R. H., (1991), "True and Fair: A survey of UK financial directors", *Journal of Business Finance and Accounting, 18(3), pp. 359-75.*

Nobes, C., (1991), "Harmonization of Financial Reporting", *London: Prentice Hall.*

Nobes, C. W., (1993), "The origins of the harmonising provisions of the 1980 and 1981 Companies Acts", *Accounting and Business Research, 24(93), pp. 43-53.*

Nobes, C., (1995), "International Accounting Harmonization: A Commentary", *European Accounting Review, 4 (2): pp.249-254*.

Nobes, C. and Parker, R., (1998), "Comparative International Accounting", *5th edn., London: Prentice-Hall Europe.*

Nobes, C., (1998), "The future shape of harmonization: some responses", *European Accounting Review, vol. 7, no. 2: pp.323-333*.

Nobes, C. and Parker, R., (2000), "Comparative Intemational Accounting", *Englewood Cliffs, NJ: Prentice Hall.*

Nobes, C. W. and Parker, R., (2002), "Comparative International Accounting", *7th edn Englewood Cliffs, NJ: Prentice Hall.*

Nobes, C., (2002), "International harmonization of accounting", *in C. Nobes and R. Parker (Eds) Comparative International Accounting", Upper Saddle River, NJ: Prentice-Hall ,7th edn, pp. 72-102.*

Nobes, C., (2005,) "The survival of international differences under IFRS: towards a research agenda", *Working Paper, University of Reading*.

Nobes, C., (2006), "The survival of international differences under IFRS: towards aresearch agenda", *Accounting and Business Research, Vol. 36, No. 3, pp. 233-245.*

Nobes, C., and Schwencke, H.R., (2006), "Modelling the links between tax and financial reporting: A longitudinal examination of Norway over 30 years up to IFRS adoption", *European Accounting Review, 15:1, pp. 63-87.*

Nobes C. and Parker R., (2006), "Comparative international accounting", *ninth edition, Harlow, Prentice Hall.*

Nobes, C., (2008), "Accounting Classification in the IFRS Era", *Australian Accounting Review, 18(3): pp. 191-198.*

Nobes, C., (2010), "On researching into the use of IFRS by private entities in Europe", *Accounting in Europe, 7(2), pp. 213–226.*

Nobes, C. W., (2011), "IFRS practices and the persistence of accounting system classification", *Abacus 47 (3): pp. 267-283.*

North, D. S. and O'Connel, B. T., (2002), "Earnings management and mode of payment in takeovers", *working paper, University of Richmond, Richmond, VA.*

Obloj, K. and Kostera, M. (1993) "Polish privatisation, action, symbolism and cultural barriers", *Industrial and Environmental Crisis Quarterly, 7(3), pp. 7-21.*

O'Connell V. and Sullivan K., (2008), "The Impact of Mandatory Conversion to IFRS on the Net Income of FTSEurofirst 80 Firms", *The Journal of Applied Research in Accounting and Finance, Vol. 3, pp. 17-26.*

O'Hanlon, J., (2013), "Did Loan-Loss Provisioning by UK Banks Become More Timely or Less Timely After Adoption of IAS 39?" *Accounting and Business Research, 43:3, pp. 225-258.*

Ohlson, J. A., (1991), "Earnings, Book Values, and Dividends in Security Valuation", *Working Paper, Columbia University.*

Ohlson, J. A., (1995), "Earnings, Book Values and Dividends in Equity Valuation" *Contemporary Accounting Research, Spring pp. 661-687.*

O'Malley, (1993), "Comparative International Accounting. A Survey" *New York: Prentice Hall.*

Onali, E., and Ginesti, G., (2014), "Pre-adoption market reaction to IFRS 9: a cross-country event-study", *Journal of Accounting and Public Policy, vol. 33, No. 6, pp. 628-637.*

Ordelheide, D., (1998), "Zur politischen Okonomin der Rechnungslegung", *In: W. Ballwieser and T. Schildback (Eds).* Rechnungslegung und Steuern international. Zeitschrift für betriebswirtschaftliche Forschung*, 68 (Special Issue 40), pp. 1-16.*

Ordonez, G., (2013), "Sustainable shadow banking", *NBER Working Paper, No. 19022.*

Orszag, J. M. and Choudhary M. A., (2005), "Are Performance Conditions on Executive Options Driven by Fundamentals?" *Watson Wyatt Technical Paper, No. 2005-6.*

Pallant, J., (2005), "SPSS Survival manual: a step by step guide to data analysis using SPSS version 12", *Berkshire: Open University Press.*

Papadatos, K. and Bellas A., (2011), "The value relevance of accounting information under Greek and International Financial Reporting Standards: the influence of firm specific characteristics", *International Research Journal of Finance and Economics, 76, pp. 6-23.*

Parker, L. D. and Roffrey, B. H., (1997), "Methodological Themes, Back to the Drawing Board: Revisiting Grounded Theory and the Everyday Accountant's and Manager's Reality", *Accounting, Auditing, and Accountability Journal 10 (2): pp. 212-247.*

Parker, R. H., (2002), "Comparative international Accounting" *New York: Prentice Hall.*

Pascual, G., León, A. and Zorio, A. (2002) "Measurement of formal harmonization progress: The IASC experience", *The International Journal of Accounting, 37, pp. 1-26.*

Patel, R. and Davidsson, B., (1994), " Forskningsmetodikens grunde- Att planera, genomfora och rapportera en undersokning" *Studentlitteratur Lund, Sweden.*

Patten, M. L., (2004), "Understanding research methods", *Glendale, California: Pyrczak Publishing, 4th Edition.*

Pearson, K., (1892), "The Grammar of Science", *London, Walter Scott.*

Pellens. B., (2001), "Internationale Rechnungslegung", *Sluttgart: Schäffer-Poeschel.*

Ramanna, K. and Sletten, E., (2014), "Network effects in countries' adoption of IFRS", *The Accounting Review, In-Press.*

Penman, S. H., (1991), "An Evaluation of Accounting Rate of Return", *Journal of Accounting, Auditing and Finance, Volume 6 Issue 2, pp. 233-256.*

Perramon, J. and Amat, O., (2006), "IFRS Introduction and its Effect on Listed Companies in Spain", *available at SSRN: http://ssrn.com/abstract=1002516.*

Perry, S. E., Williams, T. H., (1994), "Earnings Management Preceding Management Buyout Offers", *Journal of Accounting and Economics 18, pp. 157-179.*

Petroni, K., Wahlen, J.M., (1995), "Fair values of equity and debt securities and share prices of property-liability insurer", *The Journal of Risk and Insurance 62 (4), pp. 719–737.*

Pierce, A., and Weetman P., (2000), "Measuring Financial Reporting Harmony and Harmonization: Perception versus Reality", *The Irish Accounting Review, Vol. 7, No. 2.*

Pindyck, R. and Rubinfeld, D., (1981), "Econometric models and economic forecasts *McGraw-Hill, New York.*

Plantin, G., (2015), "Shadow banking and bank capital regulation", *Review of Financial Studies, 28(1), pp. 146–175.*

Platikanova, P. and Nobes, C., (2000), "Was the Introduction of IFRS in Europe Value-Relevant?", *Working Paper, University Pompeu Fabra and University of Reading.*

Polgar, S. and Thomas, S. A., (1995), "Introduction to Research in the Health Sciences", *Churchill Livingstone, Melbourne, 3rd Edition.*

Posner, R., (1974), "Theories of economic regulation", *Bell Journal of Economics and Management Science, pp.335-58.*

Pownall, G. and Schipper, K., (1999), "Implications of accounting research for the SEC's consideration of International Accounting Standards for US securities offerings", *Accounting Horizons, 13(3): pp. 259-280.*

PricewaterhouseCoopers (2002), "2005 – Ready or not: IAS in Europe – the Views of over 650 CFOs," *www.pwcglobal.com.*

PricewaterhouseCoopers, (2009), "Lehman Brothers' Bankruptcy Lessons learned for the survivors Informational presentation for our clients".

Punch, K., (1998), "Introduction to Social Research: Quantitative and Qualitative Approaches", *London: Sage.*

Quattrone, P., (2000), "Constructivism and accounting research: towards a trans-disciplinary perspective", *Accounting, Auditing and Accountability Journal, vol.13, no.2, pp. 130-155.*

Raby, G., (2003), "The costs of terrorism and the benefits of cooperating to combat terrorism" *Department of Foreign Affairs and Trade, Economic Analytical Unit.*

Radebaugh, L. and Gray, S., (1993), "International Accounting and Multinational Enterprises", *New York. John Wiley and Son.*

Radebaugh, L. and Gray, S., (2002), "International Accounting and Multinational Enterprises", *5th edn, New York: John Wiley.*

Rahman, A., Perrera, H. and Ganesh, Sh., (2002), "Accounting Practice Harmony, Accounting Regulation and Firm Characteristics", *Abacus, Vol. 38. No.1.*

Ramanna, K. and Watts, R. L., (2007), "Evidence on the effects of unverifiable fair-value accounting", *Harvard Business School Working Paper No. 08-014.*

Raudenbush, S. W. and Bryk, A. S., (2002), "Hierarchical Linear Models Applications and Data Analysis Methods", *Sage Publications, Inc, 2nd Edition.*

Reed, M., (2005), "Reflections on the 'realist turn' in organization and management studies", *Journal of Management Studies, Vol. 42, pp. 1621-44.*

Rees, L., and Sivaramakrishnan, K., (2007), "The effect of meeting or beating revenueforecasts on the association between quarterly returns and earnings forecast errors", *Contemporary Accounting Research, 24, pp. 259-290.*

Remenyi, D., Williams, B., Money, A. and Swartz, E., (1998), "Doing Research in Business and Management: An Introduction to Process and Method", *London: Sage.*

Renders, A. and Gaeremynck, A., (2007), "The impact of legal and voluntary investor protection of the early adoption of international financial reporting standards (IFRS)" *De Economist 155: pp. 49-72, No 1.*

Roberts, A., (1995), "The Very Idea of Classification in International Accounting", *Accounting, Organizations and Society, Vol. 20, Nos 7/8, 1995.*

Roberts, C., Salter, S.B and Kantor, J. (1996) "The IASC Comparability Project and Current Financial Reporting Reality: An Empirical Study of Reporting in Europe,". *British Accounting Review, Vol.28. pp. 1-22.*

Roberts, C., Weetman, P. and Gordon, P., (1998), "International Financial Accounting, a comparative approach", *Financial Times Professional Ltd, UK.*

Roberts, C., Weetman, P. and Gordon, P., (2005), "International Financial Reporting: A Comparative Approach*", 3rd edition, Prentice Hall.*

Ryan, S. G., (2008), "Accounting in and for the subprime crisis", *The Accounting Review, 83(6), pp. 1605-1638.*

Saavedra, E., (1996), "Teacher study groups: Contexts for transformative learning and action", *Theory Into Practice, 35(4), 271–277.*

Salin, D., (2001), "Prevalence and forms of bullying among business professionals: a comparison of two different strategies for measuring bullying", *European Journal of Work and Organizational Psychology, 2001, 10 (4), pp. 425-441.*

Samuels, J. M. and Piper, A., (1985), "International Accounting: A Survey", *London: Croom Helm.*

Sarantakos, S., (2005), "Social research", New York: Palgrave Macmillan, *3rd Edition.*

Saudagaran, S. M. and G. K. Meek., (1997), "A Review of Research on the Relationship between International Capital Markets and Financial Reporting by Multinational Firms", *Journal of Accounting Literature* 16 : *pp.127-159*.

Saudagaran, S. M., (2004), "International Accounting: A User Perspective" *(2nd edition), Thompson SouthWestern, Ohio*.

Saunders, M., Lewis, P. and Thornhill, A., (2007), "Research Methods for Business Students", *Harlow: FT Prentice Hall, 4th Edition.*

Saunders, M., Lewis, P. and Thornhill, A., (2016), "Research Methods for Business Students", *Harlow: Pearson Education Limited, 7th Edition.*

Schipper, K., (1989), "Earnings management", *Accounting Horizons, 3*(4*), pp. 91-102.*

Schipper, K. and Vincent L., (2003), "Earnings quality", *Accounting Horizons 17(Supplement), pp. 97-110.*

Schipper, K., (2005), "The introduction of International Accounting Standards in Europe: Implications for international convergence", *European Accounting Review,Vol. 14, Iss. 1, pp. 101-126.*

Schon, D., (1983), "The reflective practitioner: How professionals think in action", *New York: Basic Books.*

Schoenmaker, D., (2016), "The Banking Union: An overview and open issues" *In T. Beck, and B. Casu (Eds.), Handbook of European Banking, Basingstoke: Palgrave MacMillan.*

Schonfeld, E., (1998), "The guidance game", *Fortune, 138: pp. 267-268.*

Schuetze, W. P., (1994) "What is the future of mutual recognition of financial statements and is comparability really necessary?", *European Accounting Review, 3(2): pp.330-334.*

Scruton, R., (2001), "Kant: A Very Short Introduction", *Oxford University Press, Oxford.*

SEC, (2003), "Report Pursuant to Section 704 of the Sarbanes-Oxley Act of 2002", available at*: http://www.sec.gov/news/studies/sox704report.pdf*

Sellhorn, T. and Gornik-Tomaszewski, S., (2006), "Implications of the 'IASregulation' for research into the international differences in accountingsystems", *Accounting in Europe, vol. 3, no. 1: pp.187-217*.

Shan, Y., (2015), "Value relevance, earnings management and corporate governance in China", *Emerg. Markets Rev. 23, 186-207.*

Sharp, J., Peters, J. and Howard, K., (2002), "The Management of a Student Research Project", *Aldershot: Gower, 3rd Edition.*

Shuto, A., (2007), "Executive compensation and earnings management: Empirical evidence from Japan", *Journal of International Accounting, Auditing and Taxation. 16: pp. 1-26.*

Sim, J. and Wright, C., (2000), "Research in Health Care. Concepts, Designs and Methods", *Stanley Thornes (Publishers) Ltd., London.*

Sloan, R. G., (1999), "Evaluating the reliability of current estimates." *Journal of Accounting and Economics 26,* pp. 193-200.

Snedecor, G. W. and Cochran, W. G., (1989), "Statistical Methods", *Iowa State University Press, 8th Edition*

Soderstrom, S. and Sun, K., (2007), "IFRS Adoption and Accounting Quality: A Review", *European Accounting Review, Vol. 16, Iss. 4, pp. 675-702.*

Spathis, C., (2002), "Detecting False Financial Statements Using Published Data*:* Some evidence from Greece", *Managerial Auditing Journal, 17(4), pp. 179-191.*

Sprinthall, R. C., Schmutte, G. T., and Surois, L., (1991), "Understanding educational research", *Englewood Cliffs, NJ: Prentice Hall.*

Starbuck, W., (2003), "The origins of organization theory", *in H. Tsoukas and C. Knudsen (eds) The Oxford Handbook of Organization Theory: Meta-Theoretical Perspectives. Oxford: Oxford University Press.*

Stainback, S. B. and Stainback, W. C., (1988), "Understanding and conducting qualitative research", *Dubuque, IA: Kendall/Hunt.*

Stenheim, T., and Madsen, D., (2017), "The shift of accounting models and accounting quality: The case of Norwegian GAAP", *Corporate Ownership and Control, 14(4-1), pp. 289-300.*

Stigler, G.J., (1971), "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science, 2(1): pp.3-21.*

Stolowy, H., and Jeny-Cazavan, A., (2001), "International accounting disharmony: the case of intangibles", *Accounting, Auditing & Accountability Journal, Vol. 14 Issue: 4, pp.477-49.*

Stolowy H. and Breton G., (2004), "Accounts Manipulation: A Literature Review and Proposed Conceptual Framework", *Review of Accounting and Finance, vol. 3, no.1, pp. 5-66.*

Street, D. L., Gray, S. J. and Bryant, S. M., (1999), "Acceptance and observance of International Accounting Standards: an empirical study of companies claiming to comply with IASs", *The International Journal of Accounting, 34(1), pp. 11-48.*

Street, D. L. and Gray, S. J., (2001), "Observance of International Accounting Standards: Factors Explaining Non-compliance", *ACCA Research Report No. 74 (London: ACCA).*

Street, D. L. and S. J. Gray, (2002), "Factors Influencing the Extent of Corporate Compliance with International Accounting Standards: Summary of a Research Monograph", *Journal of International Accounting, Auditing and Taxation, Vol. 11, pp. 51-76.*

Street, D. L. and Linthicum C. L., (2007), "IFRS in the US: it May Come Sooner Than You Think: A Commentary", *Journal of Accounting Research, Vol. 6, pp. 9-17.*

Strong, N., (1992), "Modelling Abnormal Retums: A Review Article", *Journal of Business Finance and Accounting.*

Sucher, P. and Alexander, D., (2002), "IAS: Issues of Country, Sector and Audit Firm Compliance in Emerging Economies", *London: Centre for Business Performance of the Institute of Chartered Accountants in England and Wales*.

Sun, K., (2006), "Financial reporting quality, capital allocation efficiency, and financing structure: an international study", *Working Paper, University of Hawaii at Manoa.*

Sunder, S., (2002), "Regulatory Competition for Low Cost-of-Capital Accounting Rules", *Journal of Accounting and Public Policy 21*.

Sunder, S., (2007), "Uniform Financial Reporting Standards: Reconsidering the Top-Down Push", *The CAP Journal, March 2007.*

Susman. G. I., (1983), "Action research: a sociotechnical systems perspective". *In: G. Morgan (Ed.), Beyond Method Strategies for Social Research (Beverly Hills, CA: SAGE, 1983).*

Tan, L., (1996), "The Singapore experience", *Accountancy, London, vol.118,No. 1237, pp. 68-69.*

Tang, Q., (1994), "Economic Consequences of International Harmonization ofAccounting Standards: Theory and its Chinese Application", *International Journal of Accounting, 29 (2): pp. 146-160.*

Taplin, R., Tower, G. and Hancock, P., (2002), "Disclosure and Compliance of Accounting Policies: Asia-Pacific Evidence", *Accounting Forum, 26 (2): pp.172-190.*

Taplin, R. H. (2003). "Harmony Statistical Inference with the Herfindahl H Index and C Index", *Abacus, vol.39, No. 2.*

Tarca, A., (2004), "International Convergence of Accounting practices: Choosing between IAS and US GAAP" *Journal of International Financial Management and Accounting 15:1, pp. 60-91.*

Tay, J. S. W. and Parker, R. H., (1992), "Measuring International Harmonization and Standardization: a Reply", *Abacus, vol.28, No. 2.*

Taylor, P., and Turley, S., (1986), "Modern development in accounting and finance: The regulation of accounting, *Oxford: Basil Blackwell*.

Teddlie, C. and Tashakkori, A., (2009), "Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences" *Thousand Oaks, CA: Sage.*

Tendeloo, B. V. and Vanstraelen, A., (2005), "Earnings management under German GAAP versus IFRS", *European Accounting Review, 14 (1), pp. 155-180.*

Teoh, S., Welch, I., and Wong., T., (1998a), "Earnings management and the under performance of seasoned equity offerings", *Journal of Financial* Economics *50: pp. 63–99.*

Teoh, S., Welch, I., and Wong., T., (1998b), "Earnings management and the long-run market performance of initial public offerings", *Journal of Finance 53: pp. 1935-1974.*

Teoh, S., Wong, T. and Rao, G., (1998), "Are accruals during initial public offerings opportunistic", *Review of Accounting Studies, 3, pp. 175-208.*

Thorell, P., and Whittington, G., (1994), "The harmonization of accounting standards within the EU: Problems, perspectives and strategies", *European Accounting Review 3 (2): pp. 215-239.*

Tomkins, C. and Groves, R., (1983), "The Everyday Accountant and Researching His Reality", *Accounting, Organizations and Society (Vol. 8, No. 4), pp. 361-374.*

Trottier, K., (2013), "The effect of reversibility on a manager's decision to record asset impairments", *Accounting Perspectives, 12(1), pp. 1-22.*

Tsalavoutas, I. and Evans, L., (2007), "Comparing International Financial ReportingStandards (IFRSs) and Greek GAAP: Financial Statements Effects", *Workshop on Accounting in Europe, France: working paper.*

Tsoligkas, F. and Tsalavoutas, I., (2011), "Value relevance of R & D in the U.K. after IFRS mandatory Impementation", *Applied Financial Economics, 21, p. 959.*

Tukey, J. W., (1977), "Exploratory data analysis", Addison-*Wesley Publishing Company Reading.*

Tweedie, D., (2004), "Looking ahead at 2004: A global standard-setter's perspective," *Accounting, Auditing and Accountability, Vol. 12, No.2., pp. 5-7.*

Twisk J.W.R., (2006), "Applied Multilevel Analysis: A Practical Guide for Medical Researchers", *Cambridge University Press.*

Upton, G. and Cook, I., (2014), "A Dictionary of Statistics", Oxford University Press 3rd Edition.

Van der Meulen, S., Gaeremynck, A. and Willekens, M., (2007), "Attribute Differences Between U.S. GAAP and IFRS Earnings: An Exploratory Study", *International Journal of Accounting 42, pp.148-152.*

Van Der Tas, L. G., (1988), "Measuring of Harmonization of Financial Reporting Practice", *Accounting and Business Research, vol.18, No. 70, pp. 157-169.*

Van Der Tas, L. G., (1992), "Measuring International Harmonization and Standardization: A Comment", *Abacus, vol.28, No. 2.*

Van Hulle, K., (1992), "Harmonization of accounting standards A view from theEuropean community", *European Accounting Review, Vol. 1, Iss. 1, pp. 161-172.*

Van Hulle, K., (1996), "Harmonisation of accounting standards - A view from the European Community", in Nobes, C. (Ed), *International Harmonisation of Accounting, Elgar*.

Vansteerger, V., (2005), "The current state of accounting Harmonization: Impediments to and benefits from harmonization", *Department of Accountancy and Corporate Finance, Ghent University, 2005/322*.

Van Tendeloo, B. and A. Vanstraelen, (2005), " Earnings Management under German GAAP versus IFRS", *European Accounting Review 14:1, pp. 155-180*.

Vassalou, M., (2003), "News related to future GDP growth as a risk factor in equity returns', *Journal of Financial Economics, 68(1): pp. 47-73.*

Venkatachalam, M., (1996), "Value relevance of banks derivatives disclosures." *Journal of Accounting and Economics 22: pp. 327-355.*

Vincent, L., (1999), "The information content of funds from operations (FFO) for real estate investment trusts (REITs)", *Journal of Accounting and Economics, Volume 26 Issue 1-3, pp. 69-104.*

Visvanathan, G., (1998), "Deferred tax valuation allowances and earnings management", *Journal of Financial Statement Analysis, Vol. 3, No. 4, pp. 6-15*.

Voulgaris F., Agiomirgianakis, G., Papadogonas Th., (2014), "Job creation and job destruction in economic crisis at firm level; the case of Greek manufacturing

sectors", *Journal of International Economics and Economic Policy, Vol. 12, No. 1, pp. 21-39.*

Wadsworth, Y., (1998), "What is Participatory Action Research?", *Action research international, Learning and Development, and Southern Cross University Press.*

Wainwright, D., (1997), "Can Sociological Research Be Qualitative, Critical and Valid?", *The Qualitative Report, 3 (2).*

Wallen, N., E. and Fraenkel, J. R., (2001), "Educational research: A guide to the process", *Mahwah, NJ: Lawrence Erlbaum Associates, Publishers, 2nd Edition.*

Wallison, P., (2008a), "Fair Value Accounting: A Critique", *American Enterprise Institute for Public Policy Research Outlook Series.*

Wallison, P., (2008b), "Judgment too important to be left to the accountants", *Financial Times.*

Walton, P., (1993), "A European true and fair view? Introduction: the true and fair view in British accounting", *European Accounting Review, 2(1): pp. 49-58*.

Walton, P., (2004), "IAS 39: where different accounting models collide", *Accounting in Europe, S1, pp. 5-16.*

Watts, R, L. and Zimmerman J. L., (1990), "Positive accounting theory: A ten year perspective", *The Accounting Review, 65(1): pp.131-156.*

Weilienberger, B., E., (2002), "Angeizkomptible Erfolgsrechnung im Kozern-Grundmuster und Gestaltungsalternativen", *Wiesbaden: Deutcher Universitats - Verlag*.

Wilczynski, W., (1996), "The Economy and Politics of the Transformation Period", *Warszawa: Wydawnictwo Wyzszej Szkoly Bankowe*j.

Wyatt, A., (1997), "International Accounting Standards and Organizations: Quo Vadis?", *International Accounting and Finance Handbook. New York: Wiley*.

Wu, J., S. and Zhang, I., (2017), "Mandatory IFRS Adoption and the Role of Accounting Earnings in CEO Turnover Contemporary Accounting Research, Forthcoming" *Available at: SSRN: https://ssrn.com/abstract=2809358.*

Xu-D., Ji, W.Lu, (2014), "The value relevance and reliability of intangible assets", *Asian Review of Accounting. 22(3) (2014) pp.182-216.*

Younger, P., (2004), "Using the internet to conduct a literature search", *Nurs Stand 19(6): 45-51.*

Zambon, S. and Saccon, C., (1993), "Accounting change in Italy - fresh start or *Gattopardo*'s revolution ?", *European Accounting Review, 2(2): pp. 245-84*

Zeghal, D., Chtourou, S. M., and Fourati, Y. M. (2012), "The effect of mandatory adoption of IFRS on earnings quality: Evidence from the European Union", *Journal of International Accounting Research, 11(2), pp. 1-25.*

Zuber-Skerritt, O., (1992), "Professional Development in Higher Education: A Theoretical Framework for Action Research", *Kogan Page, London.*

Appendix I: < Descritpive Tables>

Table 1-Key Factors of the Project's background

Key Factors before and after IFRS	Brief details
Accounting groups in Europe before IAS/IFRS	1. Continental/code-law system. It was dominated by the principle of prudence, with stakeholder orientation 2. Anglo-Saxon/Common-law system. It does not take the specific European environment into consideration (Hoarau, 1995), but prefers low levels of regulation and taxes, and low barriers of information to investors in the capital markets (Epps and Oh, 1997).
International Accounting Standards Committee (IASC) Establishment	In 1973, the professional accountancy bodies of Australia, Canada, France, Germany, Japan, Mexico, Netherlands, United Kingdom, Ireland, and the United States cooperated and established IASC
Introduction of Fourth (78/660/EC) and Seventh (83/349/EC) EU Directives	These EU Accounting Directives are the cornerstones of EU accounting harmonization. They don't aim to set accounting rules in the EC under uniformity, (Stolowy and Jeny-Cazavan, 2001), but they prescribe a common set of accounting rules and require EU firms to prepare audited financial accounts and to provide publicly accessible financial statements.
International Accounting Standards Board (IASB) establishment, replacing the IASC, in order to implement the final IFRS regimes	The International Accounting Standards Board (IASB) replaced the International Accounting Standards Committee (IASC) in 2001, under an organisational restructuring program. IASC released the first common rules, called International Accounting Standards (IAS), from 1973 until 2000. It managed to release a series of standards based numerical sequence from IAS 1 to IAS 41. The IASB has adopted these body of standards, but any new standard released after 2001 would be published under the series name IFRS. For convenience, under IFRS we mean both IAS and IFRS. Details: *http://www.ifrs.org/about-us/who-we-are/#history* and *http://www.iasb.org/about/history.asp* Under this transformation the SIC (Standing Interpretation Committee) was renamed also to IFRIC (International Financial Reporting Interpretations Committee) (IAS 1.11).
Accounting scandals in 2001	Dot-com collapse or the dot-com bubble is the term that describes the period from 1997 to 2001, when many internet-based companies were established, taking advantage of the rapid technological improvement and triggering investors' interest. As a consequence, they had hugely increased their market capitalization but most of them did not confirm the earnings the investors' estimated. As a consequence, they went bankrupt. Most analysts consider that this bubble grew out of a combination of speculations and the absence of regulations. *Details: http://cnnfn.cnn.com/2000/11/09/technology/overview/* Enron case on the other hand did not directly perform stock market speculation, but it had to deal with accounting misinterpretations. It was in 2001 when one of the America's largest corporations collapsed after fraud detection. It was a besmearing moment for all US market participants, from authorities to accountants and investors. *Details: http://news.bbc.co.uk/2/hi/business/1780075.stm*
The Sarbanes-Oxley Act (SOX) in the US	The Sarbanes-Oxley Act (SOX) was the reaction of US authorities to several accounting scandals, like Enron, to protect investors that had lost their faith in the US accounting system. It was introduced in 2002 and it was named after its sponsors, US Senator Paul Sarbanes and US Representative Michael Oxley. It includes several regulations that enforce protection mechanisms and increase accuracy. Its main reformation mandates strict financial disclosures for corporations, requires top management to certify the accuracy of financial information, defines which company records need to be stored and increases the penalties for severe fraudulent activity.

	Details: https://www.sec.gov/about/laws/soa2002.pdf
IFRS official introduction in 2005	From January 1st 2005, companies traded on a regulated market of any European Member State or other countries that also adopted IFRS, need to prepare their financials under IFRS. The regulation was about consolidated accounts of listed firms. However, Member States have the option to require or permit this option to unlisted companies and to individual financial statements (EC, 2005). Results denote that most Member States allowed this option (Larson and Street, 2004). Furthermore, a temporary exception was approved for companies that traded also in other regulated countries like for example in the U.S. For these firms, IFRS compliance has been postponed until January 1, 2007 (EC, 2002). To facilitate companies with the IFRS implementation and transition to this new framework, in June 2003, the IASB issued IFRS 1, called "First-Time Adoption of International Financial Reporting Standards" (IASB, 2003), where it is described all information. Although IASB is the responsible standard setting body, however, these standards need to be endorsed by the EC to control if they assemble to EU. For this reason, it has been established the Accounting Regulatory Committee (ARC) that is responsible to provide early opinions on the Commission's proposals to endorse IFRS. Similarly, additional entities and organisations surround the performance of the IASB on an effort to face IFRS challenges and proceed to appropriate enforcements. Indicative examples are the Committee of European Securities Regulators (CESR), the Federation of European Accountants (FEE) The International Audit and Assurance Standards Board (IAASB), the European Financial Reporting Advisory Group (EFRAG) etc. All these panels aim to prepare recommendations to facilitate, encourage and intensify the adoption of IFRS. Of course, every Member State could have its own review panel, as for example the Financial Reporting Review Panel (FRRP) in the UK.
IFRS European countries in 2007	On January 1st, 2007, in the EU participated 27-member countries: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. Additionally, Iceland, Liechtenstein and Norway as part of European Economic Area (EEA) have also adopted IFRS.
IFRS in the US in 2007	From 2007 IFRS have been accepted in the US without being necessary their reconciliation to US GAAP.
IFRS and the crisis of 2008	Under the crisis, the IASB eased fair value accounting standards related to financial instruments (IAS 39 and IFRS 7), offering the choice to companies to retroactively reclassify financial assets that were previously measured at fair value into amortized cost, expanding this reclassification concession to assets that were voluntarily classified.
Recent Warning signs	The US Justice Department is aiming to regulate the new banking environment and eliminate any skewed cases from the past crisis, imposing a fine on a number of banking institutions. I refer to the following indicative cases that could lead to a possible new downturn of the global economies. The companies of Royal Bank of Scotland and Deutsche Bank. *Sources: http://uk.reuters.com/article/uk-rbs-legal-idUKKCN12A1WQ* *http://www.wsj.com/articles/deutsche-bank-is-asked-to-pay-14-billion-to-resolve-u-s probe-into-mortgage-securities-1473975404* The Globo company is the latest case that shocked European stock markets, as the company was delisted from AIM Market in UK, after being accused of market abuse, accounts falsification and insider dealing. Source: *http://www.independent.co.uk/news/business/analysis-and-features/globo-sails-too-close-to-the-wind-a6709986.html*

Table 2 - Timeline of the Literature review

Phases	Review
Phase I: up to 1994 Accounting Harmonisation and Globalisation Initial steps	• What do we mean by Harmonization, Harmony, and Globalization? • Accounting Directives • IAS formulation • IAS vs Directives • Harmonisation Level • Advantages and disadvantages
Phase II: 1995-2003 IAS implementation and international accounting	• IAS voluntarily application • Harmonisation Level • IAS vs national GAAP vs US GAAP • Fair value • Market effects • Earnings management • Audit quality • Taxation
Phase III 2004-onwards IFRS introduction	**1. Official IFRS adoption (2005)** • IFRS harmonisation • IFRS vs Old GAAP vs IAS **2. IFRS vs US GAAP (2007)** • Reconciliation after the SEC **3.IFRS and US GAAP under crisis (2008)** • Effect of the crisis • Abnormal returns • Reclassification option, Fair value • Banking crisis, • Shadow banking • IFRS 9

Table 3 - Stages of Literature synthesis

1. Parameters definition	• Language of publication, • Subject area, • Business sector, • Geographical area, • Publication period, • Literature type.
2. Keywords Development	Developing keywords or search terms is the lynchpin of the review. It is the most common and the most important method of identifying and searching literature (Ely and Scott, 2007). However, they need to be carefully formulated, considering effectiveness, accuracy and time allocation, avoiding extremely narrowly or broadly defined parts of the subject. The research identified its terms through discussion, brainstorming, initial reading and relevance trees (Bell, 2005). Furthermore, I considered similar, related and/or alternative keywords that might elicit different set of results or further information, while in most cases I operated a strategy of combining keywords using boolean operators, meaning words that link terms together, such as 'AND', 'OR', 'NOT' (Ely and Scott, 2007). Finally, special attention was paid to spellings and terminology, as well as to singular and plural versions of words (Younger, 2004).
3. Sources of information	A review, in order to be well written and objective, should gather information from different sources. Although the distinctions between them could be ambiguous and often overlap, I consider three main categories of sourcing: primary (published and unpublished), secondary and tertiary. Primary sources refer to original studies that contain original research data. They include published sources such as reports, government publications, results in journals, dissertations, conference proceedings or even unpublished manuscripts. Secondary sources rely on the subsequent interpretation of primary literature. They use primary sources to synthesize and integrate new research. They are addressed to a wider audience, they are more easily located and consist of books, journals, review articles etc. Tertiary sources provide key research information gathered from other resources. They are search tools designed to locate research from the previous categories. For this, they include indexes and abstracts and consist of textbooks, encyclopedias, handbooks, newspapers etc. I mainly focused on journals, reports, theses and books. Professional journals and reports have been excluded from the literature review, although they have been used in the body of the research, including hypothesis formulation and analysis. I aimed in this way at a high degree of academic integrity in this part, eliminating any question-marks as to accuracy. The only exception was in the crisis and shadow banking section of the review. As these were recent concepts for the literature, in order to gather more information, I also included working papers and professional reports, always considering the restricted valuation and quality criteria.
4. Databases Location	After defining the necessary sources, I needed to locate the appropriate databases and search engines in order to obtain the literature. Therefore, the study searched for printed sources on library catalogues but it mainly explored relevant electronic databases. Computer databases offer access to an enormous quantity and quality of information, in an easier and quicker manner (Younger, 2004).
5. Evaluation of the results	Once the initial search has been completed it is necessary to perform a critical review of the content. I need to analyse, select and synthesize the findings, assessing the quality of the literature gathered, as well as its relevance, value, sufficiency and correspondence. However, critical appraisal of a collection of articles could be complex. Therefore, the study has established a set of criteria. It included items that were up-to-date, it focused only on their current version and it included cases whose main objectives were sufficiently close to our research. On the contrary, superseded papers, items that were irrelevant, insufficient and low value or researches that

	seemed to be biased, had methodological omissions, were imprecise and overall lacked academic integrity (McNeill and Chapman, 2005), have been excluded. Special attention has been given to clear and well-defined methods, to the interpretation of results and to the coherence of format. Finally, my inclusion criteria consider whether a paper's questions have been answered, whether its aim has been achieved and whether it has strong references and citation index. Some of these guidelines were easy to scan, while other involved more steps. Consequently, the research initiated a preview filtering stage, where I had the opportunity to focus on peer-reviews and other critiques. After this initial impression, the remaining items have been fully read in order to assess the rest of the criteria.
6. Recording the Results	The recording stage may seem trivial, but it is extremely time effective. The study recorded all results retrieved from the previous step, even papers that had been discarded, in case they were needed at a later stage. Most of the items were in electronic format and in a few cases in printed copies that I scanned. Thus, I managed to safely store all files to external hard drives. Then I generated reference lists and I processed to make notes of the results. I used Microsoft's Access to mark bibliographical details, a brief summary of the content of each article and supplementary information, such as the source, the keywords and methods I used to obtain each paper (Sharp et al., 2002). At this stage, I removed any duplicate records, while both storage and information record for each article have been grouped according to literature sections.
7. Drafting and Redefining if needed	Having accomplished all the previous steps, the study managed to synthesize all information gathered on the road to completing the first draft of our literature review, focused on pertinent outcomes (Cooper, 1988) that appeared to be solid in theory and useful in practice. As it is a dynamic process that expands throughout the project's life, this was the appropriate occasion to detect whether the whole strategy worked as designed or whether it needed improvements; improvements that applied not only to redefining parameters, but to keywords, databases and valuation criteria as well. Hopefully, since I carried out an appropriate and targeted preparation I only needed to add research keywords and databases from one section to another.

Table 4 – Parameters and keywords of my review (Saunders et al., 2007)

	Parameters	Main Keywords	Boolean	Keywords in Combination	Redefined/Additional Keywords	Sources/ Databases	Literature Phase
Research Questions and Objective	Language: English, Greek, French Subject Area: Accounting, Finance Business sector: All categories Geogr. Area: Mainly Australia, Europe, US Publ. Period: The last 50 years Literature Type: Refereed Journals, Newspapers ' Articles, Books/eBooks Business Reports	Accounting Directives, IAS, IFRS, IFRS implementation, IFRS adoption, IFRS introduction	*	Globalisation, Harmonisation, UK GAAP, German GAAP, Greek GAAP, Australian GAAP, Old GAAP, National GAAP, Advantages & Disadvantages, Impact and benefits, Earnings management, Discretionary accruals, Information asymmetry, Quality information, Value relevance, Market performance, The stock market reaction, Abnormal returns, Liquidity, Volatility, Debt agreements, Debt covenant,	Accurate results, Quality information, Timeliness information, Losses recognition, Managerial discretion, Managerial interference, Transactions transparency, Objectivity of information, Incremental information, Voluntarily adoption, Investors, Numbers smoothing, Protection laws, Insider trading, Cost of equity – capital, Better comparability, Stock price associations, Amendments, Ratios Effects, Statement Effects, Individual standards Debt/equity ratio,	-Business Source Complete -EBSCO -Emerald -ESO (European Sources Online) -Factiva -Google Scholar -Lexis Nexis -Science Direct -SCOPUS -SSRN (Social Science Research Network) -Summon -The New York Times -The Wall Street Journal -Zetoc e- Libraries -Fairfax County Public Library -Free Library of Philadelphia -Johnson County Library -State Library of Queensland -State Library Victoria -University's library	All phases
		IFRS implementation in the US, IFRS adoption in the US, IFRS introduction in the US, US GAAP IFRS, IFRS reconciliation with US GAAP, IFRS convergence with US GAAP	**and or vs**	Practical considerations, Characteristics, Differences, Revenue recognition, Accounting quality, Information transparency, Benefits & costs, Advantages & disadvantages, Effects, impacts, Investor's reaction, Market reaction, Market liquidity, Insider trading, Cost of equity, Analysts' forecast, Balance sheet effects, Statement effects,	Disclosure level, Disclosure quality, US protection laws, US enforcement system, US institutional structure, US country profile, US investors, Stock price change, Abnormal trading, Abnormal returns , Volatility, Market balance, Capital market effects, Bid-ask spread, Dividend policies, Tax strategies, General adjustments, Financial performance,		Phase III

		IFRS, US GAAP, IFRS under crisis, US GAAP under crisis, IFRS Authorities, US GAAP Authorities		Financial crisis, Economical crisis, Fair value orientation, Market reaction, Reclassification option, Old national GAAP under crisis,Transparency,Objectivity, Losses recognition, Earnings recognition, Statement effects, Shadow banking, Banking sector, Investment Banks, Commercial Banks, Hedge funds, Financial institutions, Individual standards, IAS 39, IFRS 9, Regulations & laws, Capital structure, Capital requirements	Transparency, audit Comparability, Company's valuation, Information asymmetries, Creative accounting, Capital requirements, Capital structure, Speculation, Accounting misconduct, Fraud cases, Transparency, Default risk, Credit rating companies, Securitization transactions, Capital ratios, Basel regulation, Stress tests, Crisis effects, Separate standards effect, Funding opportunities, Financial regulation		

Table 5 - Fair value and IFRS standards

Standards	Purpose
IAS 16	It address to fair value option for property, plant and equipment. It requires asset impairments (and impairment reversals) to fair value.
IAS 38	It refers to intangible asset that need to be re-valued to market price.
IAS 39	It refers to financial instruments other than loans and receivables that are not held for trading, like securities held to maturity. Securities that are for sale are being recorder in the Balance Sheet only.
IAS 40	It is the fair value option for investment property.
IFRS 2	It address to share-based payments (stock, options, etc.)
IFRS 3	It provides for minority interest to be recorded at fair value.

Table 6 - IFRS standards after the official adoption in 2005

IAS	
IAS 1	Presentation of Financial Statements
IAS 2	Inventories
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors
IAS 10	Events after the Balance Sheet Date
IAS 16	Property, Plant and Equipment
IAS 17	Leases
IAS 21	The Effects of Changes in Foreign Exchange Rates
IAS 24	Related Party Disclosures
IAS 27	Consolidated and Separate Financial Statements
IAS 28	Investments in Associates
IAS 31	Interests in Joint Ventures
IAS 33	Earnings per Share
IAS 40	Investment Property
IAS 32	Financial Instruments: Disclosure and Presentation
IAS 39	Financial Instruments: Recognition and Measurement
IFRS	
IFRS 1	First-time Adoption of International Financial Reporting Standards
IFRS 2	Share-based Payment
IFRS 3	Business Combinations
IFRS 4	Insurance Contracts
IFRS 5	Non-current Assets Held for Sale and Discontinued Operations
IFRS 6	Exploration for and Evaluation of Mineral Assets
IFRS 7	Financial Instruments: Disclosures

Source: https://www.iasplus.com/en/standards

Table 7 - Action research cycles and project's activity

Cycles	Initial Questions given the project's Background	Theoretical Research Questions distilled from Literature	Practical Research Questions I aimed to answer	Hypothesis	Models
I. The introduction of IFRS in Australia, Germany, Greece and the UK.	Have IFRS succeeded in meeting their target for a high level of transparency after their compulsory adoption in Europe and Australia? How do key ratios affect and how are they affected by the transition? To what extent do the individual IFRS standards have a material impact on earnings management? How have auditors reacted in this implementation process?	Have IFRS been more transparent than old GAAP in Europe and Australia? To what extent do the individual IFRS standards have a material impact on earnings management? How auditors performed under IFRS? Smaller or bigger auditing companies performed better under IFRS?	Should an investors trust IFRS towards earnings management? What specific data and financials should they focus on their analysis? Should they consider investing in weaker economies or to strongest countries like Germany? Should investors and authorities suspect companies with non Big-4 auditors?	H1: The introduction of IFRS has decreased falsified financial statements and improved auditing quality	Test 1: FFS and IFRS Test 2: Longitudinal analysis of accruals Test 3: Individual standards and earnings management Test 4: Auditors' size and the quality of financial statements.
	Have IFRS effectively regulated insider trading?	Have IFRS adoption eliminated cases of speculative insider trading? Could insider trading be regard as a tool of earnings management?	Should investors consider the insiders activity before deciding to invest?	H2: Under IFRS firms demonstrate a decrease in speculative insider trading cases	Test 1a: Decrease of insider's purchases under IFRS Test 1b: Decrease of insider disposals under IFRS Test 1c: Decrease of the number of insiders Test 2: Accruals and insider activity Test 3: Insider dealing and abnormal returns
	Have IFRS eliminated the cost of capital for listed firms?	Have these countries managed to decrease their cost of capital under IFRS? Did they succeed this without any management of earnings?	Should accounting professional and investors pay extra attention to companies that have low or high cost of capital?	H3: Under IFRS firms exhibit lower cost of equity, without resorting to earnings management procedures.	Test 1: IFRS and cost o f equity decrease. Test 2: Accruals and cost of equity capital. Test 3: Cost of capital and abnormal returns.

II. The introduction of IFRS in the US	Has this venture enhanced the convergence process?	Is there a decrease on the difference between the two regimes? Was it the right time for the introduction of IFRS in the US?	Should investors trust IFRS in the US? Should they keep investing to IFRS companies in the US? And if so, what are the financial characteristics of companies that they should prefer?	H4: The SEC's acceptance decision to allow IFRS for foreign firms has increased the proportion of the converging process.	Test: Measuring any elimination on the differences between four IFRS and US GAAP financials.
	Have IFRS succeeded in implementing their values and overcome any difficulties in the US market?	How key financials responded to the introduction of IFRS in the US? What are the effects on the companies' financials due to IFRS in the US?		H5: Financial statement effects under IFRS for firms that used to follow US GAAP.	Test 1: Financial statement effects. Test 2: Income volatility in accounting measures.
		Have earnings management procedure eliminated under IFRS in the US?		H6: Under IFRS, firms listed in US markets tend to exhibit less earnings management.	Test 1: Volatility on financials. Test 2: Accruals Performance. Test 3: SPP and LNL.
III. IFRS and the US GAAP under crisis	Has fair value orientation in fact contributed to the financial crisis through contagion effects?	How stock markets responded to the outburst of the crisis?	Are there suspicious abnormal returns before and after the crisis? Has the stock market regain its balance after the crisis?	H7: The outbreak of the crisis has negatively affected stock performance in the banking and insurance sector in Europe, Australia and the US.	Test: Calculating the abnormal returns of financial companies during the Lehman's Brothers bankruptcy.
	Have IFRS and US GAAP regimes succeeded in overcoming the consequences of the crisis?	Why IFRS chose to allow reclassification of assets during crisis? What denote the results for its choice? How have weaker economies responded?	Should investors feel safe form the reaction of IFRS and US GAAP? Should accountants and investors pay attention to the new regulations based on IFRS9? Should they avoid investing to banks?	H8: The use of the reclassification option has resulted in financial statement effects, increasing accruals in many cases, but adding market value.	Test 1: Financial statement effects of reclassification option. Test 2: Accruals and reclassification option. Test 3: Reclassification and abnormal returns.
	Have they achieved, through their amendments and the introduction of new standards, the regulation of shadow banking? Which of the two performed better?	How responded IFRS compared to the US GAAP? Has the new IFRS 9 managed to better regulate banking sector?		H9: The amendments of both IFRS and US GAAP, have improved the accuracy of the shadow banking sector.	Test 1: Income Volatility and Value Relevance as estimators for information asymmetry. Test 2: Impact on firms' value. Test 3: Impact on Earnings Management.

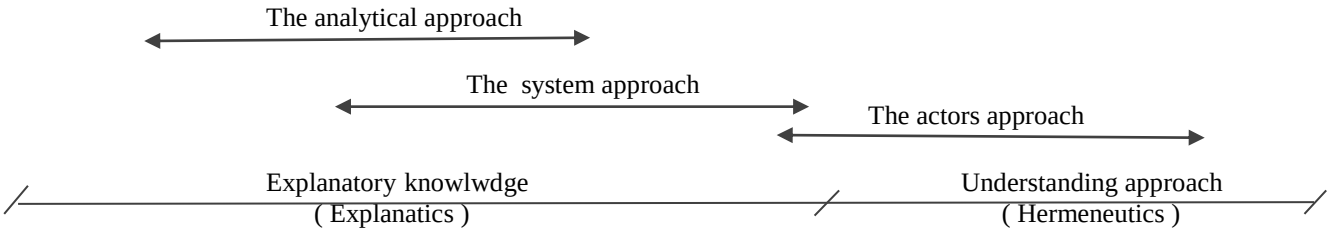
Table 8 - Foundations of Research Process

Panel A - General Layers and Major Examples			
1. Philosophy			
Extremes	**Paradigms**	**Ontology**	**Epistemology**
Objective  Subjective	Positivism	Naitive realism  Relativism	Measurable facts  Individual's perceptions
	Critical Realism		
	Pragmatism		
	Interpretivism		
	Post-modernism		
Theory Development	**Abstract Description**		
Deduction	From theory to data		
Induction	From data to theory		
Abduction	Both		
2.Methodology			
Design	**Strategy**	**Abstract Description**	
Quantitative	Survey	Brief analysis on a research area	
	Experiment	Identifies the cause-effects between variabels	
Quantitative and/or Qualitative	Archival Research	Seeking evidence in original documents	
	Case Study	One phenomenon in depth	
Qualitative	Ethnography	Describing and interpreting cultural behaviour	
	Action Research	Collaboration with a group of people	
	Grounded Theory	Theory generation grounded on data	
3.Research Methods			
Data collection Examples	**Data analysis Examples**		
Sampling	Measurement and scaling		
Questionnaires	Statistical analysis		
Measurement and scaling	Typology		
Observation	Logical Analysis		
Interview			
Focus group			
Case study			
Source: Mark Saunders, Philip Lewis and Adrian Thornhill (2015) and Crotty (1998)			
Panel B - Project's specific Elements			
Key underpinnings	**Project's Decision**	**Abstract reasoning**	
Objective vs Subjective	Both	Truth is what works at the time	
Philosophy	Pragmatism	Observe IFRS – start examine my case	
Theory Approach	Deductive	Literature review then hypotheses then data process then theory development	
Methodoloy	Quantitative Correlational Survey and Action research	Large numerical data, high freedom, evaluation of results, secondary inputs, practical application	
Data Collection Tools	Databases	Easy accessed and accurate fundamentals	
Process Techniques	Statistical analysis	Numerical Data to formulate variables	

Table 9 - Participatory paradigms

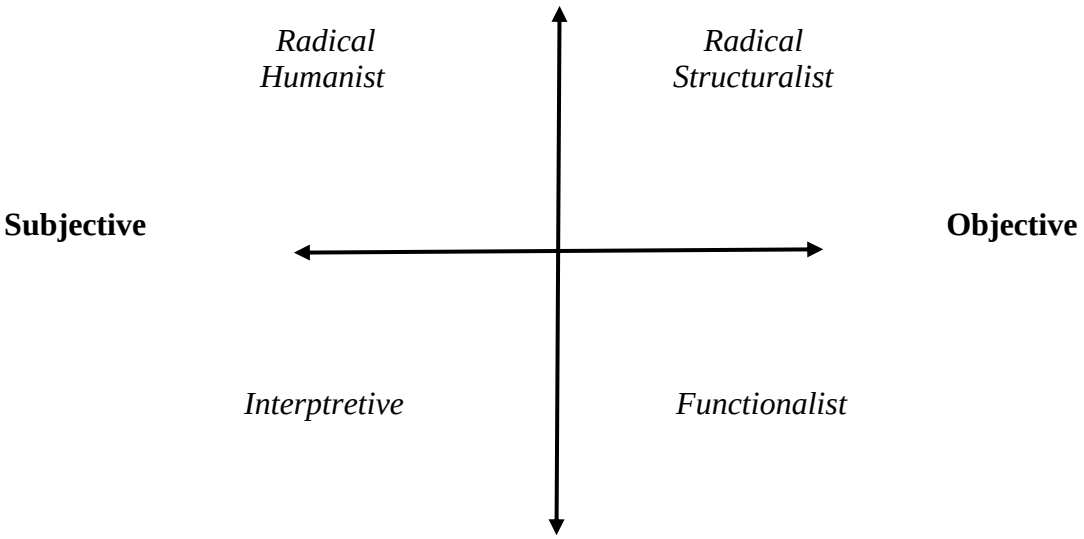
A. Categories of paradigms adapted from (Arbnor and Bjerke, 2008)

	Objectivism-Rationalistic Explaining Reality					**Subjectivist-Relativistic Understanding Reality**
	1	2	3	4	5	6
Ultimate reality presumptions	Reality as concrete & comformable to law from a structure independent of the observer	Reality as concrete determining process	Reality as mutually dependent fields of information	Reality as a world of symbolic discourse	Reality as a social construction	Reality as a manifestation of human intentionality
Ambition for creating knowledge	To reconstruct external reality-the empirically general one	To explain entireties in their regularities and breaks	To reconstrust contexts in terms of information	To understand pattems of social interaction in terms of symbolic discourse	To understand how social reality is constructed, maintained, and defined	To develop eidetical insight instead of an empirical one
Some techniques for creating knowledge	Surveys; operational definitions	Historical analysis	Contexual analysis	Symbolic analysis	Hermeneutic diagnosis	Variations of free imagination; to bracket (epochè) appearances



B. Four paradigms for the analysis of social Theory by Burrell and Morgan *(1979)*

The Sociology of Radical Change



Sociology of Regulation

Table 10 - Continuum & Implications of Positionality (Herr and Anderson, 2005)

Continuum Edges	Positionality of Researcher	Validity Criteria	Contributes to	Traditions
(1) Insider	Insider* (researcher studies own self/ practice)	Anderson & Herr (1999), Bullough & Pinnegar (2001), Connelly & Clandinin (1990)	Knowledge base, Improved/critiqued practice, Self/ professional transformation	Practitioner research, Autobiography, Narrative research, Self-study
(2)	Insider in collaboration with other insiders	Heron (1996), Saavedra (1996)	Knowledge base, Improved/critiqued practice, Professional/ organizational transformation	Feminist consciousness raising groups, Inquiry/Study groups, Teams
(3)	Insider(s) in collaboration with outsider(s)	Anderson & Herr (1999), Heron (1996), Saavedra (1996)	Knowledge base, Improved/critiqued practice, Professional/ organizational transformation	Inquiry/Study groups
(4)	Reciprocal collaboration (insider outsider teams)	Anderson & Herr (1999), Bartunek & Louis (1996)	Knowledge base, Improved/critiqued practice, Professional/ organizational transformation	Collaborative forms of participatory action research that achieve equitable power relations
(5)	Outsider(s) in collaboration with insider(s)	Anderson & Herr (1999), Bradbury & Reason (2001), Heron (1996)	Knowledge base, Improved/critiqued practice, Organizational development/ transformation	Mainstream change agency: consultancies, industrial democracy, organizational learning; Radical change: community empowerment (Paulo Freire)
(6) Outsider	Outsider(s) studies insider(s)	Campbell & Stanley (1963), Lincoln & Guba (1985)	Knowledge base	University-based, academic research on action research methods or action research projects

Appendix II: < Datataset and Statistical Process >

Table 1 - Data Sample per case

(a) IFRS vs Old GAAP, Focusing years: 2004-2009									
Australia: Total sample of **459** Companies									
Sector	**No**	**Sector**	**No**	**Sector**	**No**	**Sector**	**No**	**Sector**	**No**
Automobile & Components	5	Basic Materials	71	Capital Goods	30	Commercial & Professional Services	17	Consumer Cyclicals	31
Consumer Durables & Apparel	5	Consumer Non-Cyclical	18	Consumer Services	14	Energy	62	Food Beverage & Tobacco	9
Health Care Equipment & Services	11	Healthcare	31	Industrials	42	Materials	14	Media	8
Pharmaceuticals, Biotechnology & Life Sciences	10	Real Estate	9	Retailing	10	Software & Services	7	Technology	26
Telecommunication Services	9	Transportation	7	Utilities	9				
UK: Total sample of **297** Companies									
Aerospace & Defense	8	Alternative Energy	1	Automobile & Parts	2	Beverages	3	Chemicals	7
Construction & Materials	16	Electricity	1	Electronic & Electrical Equipment	11	Fixed Line Telecommunications	4	Food & Drug Retailers	6
Food Producers	11	Gas, Water & Multiutilities	5	General Industrials	5	General Retailers	23	Health Care Equipment & Services	3
Household Goods	11	Industrial Engineering	14	Industrial Transportation	6	Leisure Goods	3	Media	18
Mining	10	Mobile Telecommunications	1	Oil & Gas Producers	8	Oil Equipment, Services & Distribution	3	Personal Goods	6
Pharmaceuticals & Biotechnology	8	Real Estate Investment & Services	13	Software & Computer Services	12	Support Services	45	Technology Hardware & Equipment	10
Tobacco	2	Travel & Leisure	21						
Greece: Total sample of **206** Companies									
Basic resources	13	Chemicals	9	Construction & Materials	32	Food & Beverages	26	Health Care	5
Holdings	3	Industrial Goods & Services	22	Media	12	Oil & Gas	3	Personal Goods	47
Public Services	3	Technology	16	Telecommunications	1	Travel & Leisure	14		
Germany: Total sample of **404** Companies									
Basic Materials	27	Construction and Materials	4	Consumer Cyclicals	97	Consumer Non-Cyclicals	14	Energy	8
Healthcare	35	Holdings	7	Industrials	85	Media	5	Real Estate	8
Technology	94	Telecommunication Services	8	Transportation Services	2	Utilities	10		
(b) IFRS vs US GAAP - Total sample of **216** Companies**, Focusing years: 2006-2007**									
Basic Materials	37	Consumer Cyclicals	25	Consumer Non-Cyclicals	19	Energy	29	Healthcare	19
Industrials	28	Technology	26	Telecommunication Services	25	Utilities	8		
(c) IFRS and US GAAP vs Crisis, Focusing years: 2009-2013									
Banking Sector – Total sample of **358** Companies									
Australia	20	Germany	19	Greece	12	UK	30	US	277
Shadow Banking Sector - Total sample of **321** Companies									
Australia	57	Germany	49	Greece	0	UK	43	US	172

Table 2 – Data Sources

Country / Data	Australia	Germany	Greece	UK	US
Intangibles	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co
Holdings	Annual Report	Annual Report	Annual Report	Annual Report	Annual Report
Inventories	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Receivables	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Cash	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Current Assets	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Total Assets	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Short-t liabilities	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Total Current Liabil.	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Long-t liabilities	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Other Long term Liab.	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Total liabilities	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Retained Profit	Annual Report	Annual Report	Annual Report	Annual Report	Gurufocus
Equity	Annual Report	Annual Report	Annual Report	Annual Report	Gurufocus
Total Reserves	Annual Report	Annual Report	Annual Report	Annual Report	Gurufocus
Sales	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Cost of Sales	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Interest Expenses	Annual Report	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Depreciation	Annual Report	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Dividend	Annual Report	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
PBIT	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Profit before Tax	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Net Profit	Screener.co	Amadeus	Amadeus	Amadeus	Screener.co/Morningstar
Share price	Yahoo	Yahoo	Yahoo	Yahoo	Yahoo
No of Shares	Screener.co	Screener.co	Screener.co	Screener.co	Screener.co
Insider trading	Australian Stock Exchange (ASX) announcements	finanzen.at	Athens Stock Exchange (ASE)	proactiveinvestors.com	-
Estimated EPS	Thomson One**	Thomson One**	Thomson One**	Thomson One**	-
Reclassification	Annual Report	Annual Report	Annual Report	Annual Report	-

**Annual reports were gathered from the firm's official site or from Mergent online*
***Thomson One accessed from TWS Workstation Platform*

Table 3 - Identification of Variables

Variable	Operational Definition	Group	Category	Hypothesis
$AC_{i,t}$	Dependent	Numerical	Continuous	H1(Test 2)
$A_{i,t-1}$	Independent	Numerical	Continuous	H1(Test 2)
$BVPS_{i,t}$	Independent	Numerical	Continuous	H9(Test 1b)
$COC_{i,t}$	Dependent	Numerical	Continuous	H3(Test 1)
$DAC_{i,t}$	Dependent	Numerical	Continuous	H6(Test 2c)
	Independent	Numerical	Continuous	H9(Test 3b)
	Variables of interest	Numerical	Continuous	H6(Test 2a), H9(Test 3a)
$DAC_{i,t}$	Dependent	Numerical	Continuous	H1(Test 4a)
DIFF(NI)	Variables of interest	Numerical	Continuous	H4
DIFF(NA)	Variables of interest	Numerical	Continuous	H4
DIFF(RONA)	Variables of interest	Numerical	Continuous	H4
DIFF(EPS)	Variables of interest	Numerical	Continuous	H4
$DV_{i,t}$	Confounding	Categorical	Dichotomous	H1(Test 4a)
DV $OCF_{i,t}$	Independent	Numerical	Continuous	H1(Test 4a)
DV $Size_{i,t}$	Independent	Numerical	Continuous	H1(Test 4a)
DV $Profitability_{i,t}$	Independent	Numerical	Continuous	H1(Test 4a)
DV $Leverage_{i,t}$	Independent	Numerical	Continuous	H1(Test 4a)
$\Delta WC_{i,t}$	Dependent	Numerical	Continuous	H6(Test 2b), H9(Test 3c)
$\Delta NP/TA$	Variables of interest	Numerical	Continuous	H6(Test 1)
$\Delta NP/\Delta OCF$	Variables of interest	Numerical	Continuous	H6(Test 1)
$\Delta Tq_{i,t}$	Independent	Numerical	Continuous	H9(Test 2)
$\Delta TA_{i,t}$	Independent	Numerical	Continuous	H9(Test 2)
$FFS_{i,t}$	Dependent	Categorical	Dichotomous	H1(Test 2a)
	Independent	Categorical	Nominal	H1(Test 1a)
$LEV_{i,t}$	Independent	Numerical	Continuous	H9(Test 2)
$LNL_{i,t}$	Independent	Categorical	Dichotomous	H6(Test 3a)
$MV_{i,t}$	Independent	Numerical	Continuous	H9(Test 2)
$NPPS_{i,t}$	Independent	Numerical	Continuous	H9(Test 1b)
$OCF_{i,t}$	Independent	Numerical	Continuous	H6(Test 2b), H9(Test 3c)
	Variables of interest	Numerical	Continuous	H6(Test 2a), H9(Test 3a)
$P_{i,t}$	Dependent	Numerical	Continuous	H9(Test 1b)
$PPE_{i,t}$	Independent	Numerical	Continuous	H1(Test 2)
$REV_{i,t}$	Independent	Numerical	Continuous	H1(Test 2)
$RR_{i,t}$	Dependent	Categorical	Dichotomous	H1(Test 1a), H5(Test 1), H6(Tests 3a,3b),H9(Test 2), H9(Test 3b)
$SPP_{i,t}$	Independent	Categorical	Dichotomous	H6(Test 3a)
Ratios				
Size	Independent	Numerical	Continuous	H1(Tests 1a,1b), H5(Test1),H6(Test2c),H6(Tests3a,3b), H9(Test 3b)
	Variables of interest	Numerical	Continuous	H5(Test 2),H9(Test 1a)

Investment	Independent	Numerical	Continuous	H1(Tests 1a, 1b),H5(Test 1), H6(Tests 3a,3b)
	Variables of interest	Numerical	Continuous	H5(Test 2),H9(Test 1a)
Growth	Independent	Numerical	Continuous	H1(Tests 1a, 1b),H5(Test 1), H6(Tests 3a,3b)
	Variables of interest	Numerical	Continuous	H5(Test 2),H9(Test 1a)
Profitability	Independent	Numerical	Continuous	H1(Tests 1a,1b), H5(Test1),H6(Test2c),H6(Tests3a,3b), H9(Test 3b)
	Variables of interest	Numerical	Continuous	H5(Test 2),H9(Test 1a)
Liquidity	Independent	Numerical	Continuous	H1(Tests 1a,1b), H5(Test1),H6(Test2c),H6(Tests3a,3b), H9(Test 3b)
	Variables of interest	Numerical	Continuous	H5(Test 2),H9(Test 1a)
Leverage	Independent	Numerical	Continuous	H1(Tests 1a,1b), H5(Test1),H6(Test2c),H6(Tests3a,3b), H9(Test 3b)
	Variables of interest	Numerical	Continuous	H5(Test 2),H9(Test 1a)

Table 4 – Indicative cases of my ratios as calculated for the main analysis
Australia 2009

Code	SALESHA	NAVSH	SALETAS	RESTAS	RESSFU	LNMV	CGEAR
AAC	0,94059	2,41724	0,24639	0,37378	0,40361	5,98220	0,35304
AAD	1,21294	1,40299	0,49183	0,06768	0,10972	6,24146	0,62737
AAT	2,11776	999,80000	0,79092	0,04961	0,12820	-6,21461	0,66616
AAU	0,51285	0,13705	0,67911	-0,29722	2,35623	2,67844	1,20119
AAX	3,62379	2,20399	0,98789	-0,04170	-0,07561	5,98200	0,54668
ABC	1,63511	1,63876	0,72856	0,00214	0,00323	7,41476	0,34533
ABV	0,00564	0,00481	0,87970	0,11579	0,12979	3,21491	0,37613
ACE	0,01816	-0,02013	0,17603	0,13961	-1,95952	1,49206	3,93286
ACG	0,09588	0,03604	1,70000	0,16322	0,20476	2,93540	0,31777
ACL	0,00356	0,20485	0,01689	0,09600	0,10181	4,84521	0,06066
ACR	0,35041	0,50981	0,67105	0,02465	0,02497	5,85512	0,03241
ADA	0,58896	0,19513	1,67554	-0,04706	-0,09348	3,79384	0,46911
ADD	0,01662	0,61103	0,02601	0,00501	0,00521	-0,94827	0,04388
ADJ	0,01871	0,03975	0,39003	0,27831	0,25160	2,18997	0,19822
ADO	0,00022	0,00384	0,04651	0,00000	0,00000	1,28722	0,19186
ADQ	0,36521	0,09910	1,65625	0,00000	0,00000	1,77513	0,55920
AEI	0,00954	-0,01126	0,46697	0,48186	1,42050	2,46257	2,42724
AEK	0,00004	0,01596	0,00098	0,00000	0,00000	-1,40402	0,72286
AES	0,00002	0,00864	0,00047	0,00000	0,00000	3,10386	999,80000
AGI	0,24836	0,05578	0,81251	0,13635	0,43447	3,91621	2,19941
AGK	1,47047	13,85933	0,76138	0,00150	0,00224	8,72005	0,35869
AGO	0,19928	0,86043	0,21812	0,04088	0,04238	6,68956	0,05739
AGX	0,00277	0,16175	0,00913	0,78490	0,61541	-0,96050	0,26783
AHD	5,46399	5,28770	0,82225	0,00010	0,00014	6,72333	0,22485
AHJ	0,21146	0,55537	0,28434	0,00000	0,00000	-0,05438	0,40925
AHZ	0,03031	0,00896	1,34628	0,05987	0,12982	1,70291	0,56621
AIO	2,76406	3,16636	0,43989	-0,77133	2,07335	7,53718	-1,44787
AJC	0,00337	0,00907	0,22059	0,03143	0,03911	1,67468	0,39541
AJL	4,89633	1,98358	0,79294	0,00107	0,00250	5,59904	0,77332
AJM	0,04761	0,18664	0,22570	0,00025	0,00034	2,46611	0,14509
AJR	0,01558	0,01053	1,21717	1,03990	0,54541	0,19872	0,08486
ALK	0,01874	0,17447	0,10572	0,13288	0,11960	4,47672	0,01414
ALL	1,70887	0,35345	1,12441	-0,11386	-1,46548	7,66741	1,19159
ALT	0,00073	0,00186	0,34940	3,16988	0,78048	2,76921	0,02600
ALU	0,50479	0,09629	1,64011	0,24033	0,45952	3,10416	0,68024
AMC	8,48071	3,07164	0,88596	-0,02802	-0,08293	8,77836	0,98435
AMM	0,34061	0,72944	0,36503	0,01599	0,02073	4,07823	0,24704
AMO	0,01858	0,01722	0,68664	-0,16197	-1,41310	1,97922	0,76033
ANG	2,10351	1,27680	1,02663	0,00223	0,00358	5,38539	0,45255
ANP	0,00639	0,01552	0,30769	0,70110	0,48777	1,25420	0,14954
AOH	0,06356	0,11795	0,27202	0,33630	0,32019	1,55047	0,37744
APA	1,89020	3,34800	0,19585	0,00008	0,00037	7,49934	2,77258
AQC	0,00163	0,02583	0,05056	2,57468	0,57173	0,88154	0,04238
ARI	4,07135	2,97382	0,87788	-0,00304	-0,00487	8,39722	0,43693
ARP	3,26659	1,58812	1,54322	0,03068	0,03948	5,89078	0,24712

ASB	2,15753	1,39988	0,80450	0,02957	0,06642	6,32914	0,64133
ASL	3,10946	2,08100	0,71471	0,01394	0,02404	6,04335	0,63947
ATI	0,00944	0,22202	0,03744	0,02819	0,03101	-0,61527	0,11568
AUK	0,00038	0,02060	0,00556	0,01005	0,01606	2,54139	0,68986

Germany 2008

Code	SALESHA	SALETAS	RESTAS	RESSFU	LNMV	CUR	DEBT
2HR	3,53984	2,45315	0,04922	0,11438	5,80273	2,06174	1,25529
7DM1	1,98326	0,30608	0,00000	0,00000	-0,43706	0,00000	5,40669
A1OS	10,75381	0,87864	0,19824	0,29197	2,31136	1,84376	4,55531
AAD	2,20385	2,38254	0,23285	0,27792	3,79459	2,29769	9,79487
AAGN	1,45603	1,44606	0,09332	0,28836	3,61103	1,02162	3,76169
AAH	1,86181	1,10739	0,06196	0,10691	4,69538	1,96407	6,33806
AAQ	1,47727	0,57744	0,60437	0,60352	3,60227	1,37976	5,69625
ABA	1,81199	2,41986	0,20376	0,48742	5,86440	1,10646	8,97360
ABE1	1,62034	0,84714	0,56898	0,46204	4,28895	1,98074	8,31043
ACV	1,34074	1,14196	0,19401	0,30296	2,38950	0,00000	3,81053
ACW	6,28571	1,02326	0,08023	0,13828	3,84802	2,63938	4,19048
ADN1	1,69500	1,21071	-4,16071	999,80000	3,31782	1,47221	4,52000
ADS	5,58042	1,13280	0,00000	0,00000	8,56637	1,35364	6,64963
ADV	4,72234	1,11185	1,52196	0,75253	3,93517	2,09342	4,95900
AEI	1,96374	0,92399	0,05843	0,12418	4,00170	1,68648	3,60282
AFX	7,38253	0,83850	0,43853	0,39145	6,55801	3,49130	5,41697
AGS	1,98333	0,68489	0,18489	0,22844	5,28705	0,00000	7,21212
AIG	1,48333	1,50211	0,00000	0,00000	3,79863	0,00000	7,12000
AIXA	3,01870	0,87166	0,33799	0,33323	6,07420	1,97732	7,07216
AJ91	2,89915	0,75507	0,67241	0,43879	2,75056	6,18279	5,86734
AJA	1,10625	0,92509	0,33972	0,37356	3,38993	2,81024	6,80769
ALG	3,12092	0,02347	-0,00566	2,62395	1,81336	0,82077	0,17200
ALX	1,82435	1,75575	0,16494	0,77892	0,15642	5,33039	5,10980
ANO	3,03613	2,64967	0,18434	999,80000	3,97893	0,46607	1,10140
ANZ	3,56234	0,41790	0,02949	0,07546	5,37345	1,82322	8,75247
AOF	6,72500	1,38660	-0,01031	-0,01626	3,35341	2,94389	7,68571
APM	2,38996	0,78459	0,99489	0,54576	3,59294	2,81238	3,90809
ART	2,19643	1,61842	6,63158	0,92139	3,36370	1,27899	1,30712
ARX	4,02522	0,79281	0,00000	0,00000	2,22083	2,36225	4,86597
ATW	3,69818	0,25532	0,18201	0,21358	2,69800	1,89629	0,00000
BAF	4,96863	0,89647	0,49301	0,59550	3,31934	1,63103	9,09797
BAG	1,37750	1,29343	0,31455	0,56303	1,50408	1,22289	2,78283
BAS	6,78323	1,22501	0,06372	0,14757	10,14526	1,30555	8,03715
BAYN	4,30695	0,62688	0,07671	0,19679	10,36586	1,24033	5,52872
BC8	6,75236	2,88551	0,28926	0,31545	5,67867	2,20698	7,59820
BDE2	1,00000	0,41071	0,03625	0,05879	3,95967	0,00000	7,66667
BDT	3,92144	1,99539	0,52963	0,92766	5,15389	1,78605	5,94823
BEI	2,36944	1,33639	0,01052	0,01875	9,27019	2,35143	6,67897
BEP	1,71053	0,73696	0,12472	0,23913	2,47603	3,35948	4,92424
BEZ3	2,07396	1,16161	0,03967	0,12477	2,73177	0,97161	3,62659
BHS	7,86239	1,08162	0,13589	0,33506	4,81974	0,78157	4,08095

BIB	3,37143	0,53153	0,51201	0,39376	3,53617	6,15194	3,27778
BIE	4,48800	1,58475	0,25989	0,40798	3,07846	1,26923	2,49333
BIJ	4,64938	1,33593	0,01242	0,01482	6,51731	4,88772	6,27667
BIO	3,29744	0,65169	0,06727	0,13794	6,45779	2,36166	3,63277
BLH	2,53447	0,98045	0,00000	0,00000	3,63759	0,70929	7,10251
BMM	2,84627	1,27652	0,01151	0,07881	1,39872	3,31012	6,80654
BMO	9,62500	1,17557	0,09924	0,27660	1,38629	4,08545	9,62500
BMW	8,35844	0,54038	0,04439	0,87279	9,57207	0,98432	2,36985

Greece 2006

Symbol	SATETAS	RESTAS	RESSFU	LNMV	NPM	QUI	CFSH
ΑΑΑΚ	0,63430	0,22448	0,28040	1,25391	-0,03468	1,32362	-0,00622
ΑΒΑΞ	0,41932	0,30461	0,41659	6,08495	0,04130	1,03214	0,58335
ΑΒΚ	2,41182	0,10766	0,35541	5,28496	0,01838	0,10630	0,00000
ΑΕΓΕΚ	0,50687	0,13734	0,41936	5,07291	-0,17079	0,72736	-0,15048
ΑΘΗΝΑ	0,50931	0,26580	0,35805	4,10370	-0,01085	1,35400	0,19163
ΑΚΡΙΤ	0,00044	0,44496	0,43860	3,03495	999,80000	0,83459	0,44848
ΑΛΚΑΤ	1,74694	0,18965	0,32140	3,31760	0,02436	0,82631	0,81488
ΑΛΚΟ	0,29785	0,13249	0,33684	3,98437	0,04239	0,82491	0,59334
ΑΛΜΥ	0,65487	0,28226	0,40660	4,54104	0,02770	0,85350	1,49279
ΑΛΣΙΝ	0,88244	0,19230	0,42306	2,15675	-0,02734	1,18792	0,06429
ΑΛΤΕΚ	0,39024	0,39377	0,60556	5,19648	0,03084	1,00625	0,45032
ΑΛΤΕΡ	0,26357	0,17256	0,49816	3,33220	0,01837	1,63028	0,14258
ΑΝΕΚ	0,51274	0,09635	0,28647	5,13550	0,09045	1,04943	0,02913
ΑΡΒΑ	0,90082	0,22520	0,37810	5,71510	0,05166	1,78958	0,00000
ΑΣΚΟ	0,79612	0,05540	0,08845	3,22515	0,08398	2,13652	0,17019
ΑΣΤΑΚ	0,12976	0,20557	0,17417	4,59915	0,40835	1,38345	0,71305
ΑΣΤΗΡ	0,13903	0,13969	0,17024	5,58603	-0,50684	0,28159	-0,33851
ΑΤΕΚ	0,47979	0,13132	0,58533	3,70241	0,01607	1,17242	0,04595
ΑΤΕΡΜ	0,39184	0,02118	0,17361	2,58451	-0,17913	0,92950	0,27210
ΑΤΛΑ	1,68882	0,05016	0,21621	4,18957	-0,00111	0,23210	0,00000
ΑΤΤΙΚ	0,34887	0,24687	0,41148	4,52483	0,00629	3,12588	0,05314
ΑΤΤΙΚΑ	0,00800	0,00000	0,00000	4,75867	-0,76039	0,54754	1,43728
ΑΧΟΝ	0,42237	2,18081	0,71729	3,83467	0,08744	4,89467	0,09030
ΒΑΡΓ	0,46745	0,22039	0,27532	2,03753	-0,02796	1,07761	-0,00474
ΒΑΡΔΑ	0,64438	0,02336	0,09002	3,31642	0,04291	0,56573	0,00000
ΒΑΡΝΗ	0,47494	0,30876	0,40109	1,69775	-0,13516	0,43570	-0,15274
ΒΙΟΣΚ	0,54440	0,22988	0,26402	2,38697	-0,18390	0,59374	0,00000
ΒΙΟΤ	0,28747	0,12386	0,24716	4,15249	0,02172	-0,07129	0,04712
ΒΟΣΥΣ	0,56841	0,33531	0,38743	2,82659	0,07808	1,08357	0,62324
ΒΟΧ	0,62886	0,00000	0,00000	3,02490	0,08667	3,05657	0,00000
ΒΥΤΕ	0,81327	0,27810	0,36498	3,94887	0,08078	1,34023	0,37386
ΒΩΒΟΣ	0,04587	0,02510	0,04487	6,89847	-0,72759	0,34419	5,78097
ΓΑΛΑΞ	0,61508	0,07983	0,17998	2,70274	0,08222	0,41829	0,21718
ΓΕΒΚΑ	0,74947	0,18560	0,31228	3,02973	0,04312	1,82760	0,12967
ΓΕΚΤΕΡΝΑ	0,51689	0,58085	0,55532	6,37730	0,04151	1,80332	1,38748
ΔΑΙΟΣ	0,16847	0,25568	0,41112	4,55808	0,05416	1,71561	0,35247
ΔΕΗ	0,42358	0,32058	0,41685	8,40165	0,01032	0,00000	3,27363

ΔΙΟΝ	1,00631	0,13747	0,37502	2,86488	0,01305	1,12396	0,19346
ΔΙΧΘ	0,65559	0,09089	0,22184	3,78378	0,12913	0,14720	0,44091
ΔΟΛ	0,46694	0,33595	0,45703	5,45558	0,03265	0,88104	0,00000
ΔΟΜΙΚ	0,29684	0,29917	0,34962	3,73519	-0,04024	1,80609	0,36682
ΔΟΥΡΟ	0,48436	0,49570	0,39324	1,70580	-0,02457	1,52135	0,14150
ΔΡΟΜΕ	0,34349	0,47312	0,41042	3,48544	0,06094	1,18660	0,06799
ΔΡΟΥΚ	0,78643	0,12704	0,28395	3,95226	0,06423	1,64133	0,61827
ΕΒΖ	0,80196	0,41708	0,44369	4,85112	-0,04851	0,71359	0,02618
ΕΒΡΟΦ	0,57929	0,08413	0,18418	3,19764	-0,02380	0,61833	0,16866
ΕΔΡΑ	0,56526	0,13394	0,31415	3,58880	0,00247	0,86539	0,24154
ΕΔΡΙΠ	0,24386	0,33728	0,41147	4,00494	0,00065	1,26769	0,00000
ΕΚΤΕΡ	0,25488	0,55493	0,42677	2,64351	0,01249	1,55414	0,22211

UK 2007

Code	SATETS	RESTS	RESSFU	CASH	ROCE	CFM	NPM
AAL	0,57344	-0,82675	999,80000	0,54323	0,53429	0,34731	0,23876
ABF	0,97564	0,02314	0,03599	0,41364	0,09298	0,12122	0,05874
ACL	1,55959	0,00827	0,01468	0,23593	0,07872	0,04777	0,02216
ACR	1,79557	0,32531	0,42353	0,00000	-0,04297	-0,06433	-0,06433
AEP	0,49169	0,11243	0,09237	0,53566	0,14055	0,35887	0,29323
AGA	0,71449	1,12404	0,56891	0,00000	0,03918	0,07858	0,07858
AGK	0,95018	0,02825	0,06592	0,70151	0,24602	0,32602	0,11592
AHT	0,57033	0,05160	0,16854	0,27027	0,06779	0,28528	0,00871
AIE	0,78268	0,15441	0,36173	0,00000	0,16934	0,09821	0,09821
AIP	0,35641	0,00800	0,03356	0,00000	0,55587	0,02742	0,02742
AKT	0,02096	0,47952	0,35190	0,00000	-0,21076	999,80000	999,80000
ALU	1,31937	0,37923	0,52083	0,33983	0,10802	0,10815	0,05829
ALY	1,71800	0,26782	0,37093	0,27051	0,17105	0,08670	0,05892
AMEC	1,29690	0,07348	0,13010	0,00000	0,10622	0,05157	0,05157
ANTO	0,65885	1,34440	0,49283	1,20275	0,16027	0,63118	0,54740
APF	0,19212	0,43149	0,32995	1,04352	0,13135	0,86899	0,86854
ARM	0,40308	-0,02969	-0,03408	0,20372	0,07067	0,29707	0,13602
ASBE	0,69819	1,16245	0,63398	0,56116	0,05486	0,03734	0,00000
ATK	1,94061	0,01503	-0,67143	0,55634	0,38095	0,09016	0,05222
AVON	1,08338	0,56624	0,39055	0,39666	-0,24710	-0,10566	-0,19939
AVV	0,78180	0,07148	0,09249	1,01693	0,33264	0,31571	0,26847
AXN	2,91742	0,44466	0,36794	0,00000	0,08645	0,02458	0,02458
AYM	0,00000	0,30942	0,37717	0,00000	0,45370	0,00000	0,00000
AZN	0,63152	0,07904	0,11403	0,76984	0,15839	0,30796	0,18583
BA	0,71658	0,23302	0,44175	0,49176	0,07647	0,12646	0,06199
BAB	1,06766	0,11770	0,30735	0,53608	0,10860	0,07892	0,04480
BAG	1,19950	0,01733	0,02431	0,97327	0,20194	0,18542	0,11348
BATS	0,54733	0,06232	0,14470	0,43118	0,19277	0,27501	0,22371
BBA	0,85958	0,19372	0,23053	0,74436	0,08908	0,15052	0,08903
BBY	1,92498	0,16404	0,53288	0,28402	0,04470	0,04038	0,02614
BDEV	0,58875	0,20343	0,28622	0,29588	0,05208	0,02777	0,02431
BG	0,53873	0,69171	0,42607	0,96118	0,09776	0,38144	0,21710
BHY	0,40325	0,00723	0,01432	0,26702	0,13787	0,27563	0,22453

BISI	0,55172	0,30747	0,37722	0,57848	-0,01271	0,11513	0,00550
BKG	0,75299	-0,75108	3,85935	0,00000	-0,99026	0,14377	0,13901
BLT	0,79223	0,02120	0,01919	0,22739	0,23141	0,39440	0,26551
BMS	1,13025	0,33991	0,41460	0,75572	0,18766	0,11663	0,09826
BMY	0,94106	0,01350	0,02108	1,27021	0,16022	0,08608	0,07858
BNZL	1,72041	0,06335	0,21691	0,13906	0,15267	0,05407	0,03632
BOY	0,64576	0,04430	0,08291	0,35077	0,09061	0,20913	0,08332
BP	1,28295	0,32051	0,28055	0,33412	0,10277	0,14735	0,07264
BPI	1,97808	0,06437	0,18158	0,11351	0,09482	0,06616	0,02004
BQE	1,36032	0,20096	0,23785	0,67208	0,19367	0,18599	0,10704
BRAM	1,59452	0,05073	0,21419	0,14584	0,12695	0,04379	0,02753
BRBY	1,04427	0,06676	0,10612	0,49158	0,32463	0,19103	0,13582
BRSN	0,68513	0,17560	0,31514	0,51775	0,07967	0,37855	0,07736
BSY	1,21313	0,40584	0,26865	0,00000	0,08494	-0,02565	-0,02565
BT.A	0,79550	0,01525	0,06451	0,37080	0,13397	0,31041	0,08255
BTG	0,86906	0,17179	0,19884	0,99926	0,10434	0,17864	0,11734

Table 5– Statistical Tests of each Hypothesis

Hypotheses	Statistical Tests	Briefly information on Target
H1: The introduction of IFRS has decreased falsified financial statements and improved auditing quality.	Test 1a:Multinomial Logistic Regression	Detect FFS performance for more than two consecutive years
	Test 1b:Binary Logistic Regression	Outline FFS firms' ratio characteristics
	Test 2:Multilevel Longitudinal Analysis	Time series accruals' examination
	Test 3:Partial Index Calculation	Examine the individual standard's proportionality on accruals
	Test 4a,b:Linear Regression	Estimate the relationship between specific ratios and accruals for Big- 4 and/or rotated auditors
H2: Under IFRS firms demonstrate a decrease in speculative insider trading cases.	Test 1a,b,c:Binary Logistic Regression	Detect any increase or decrease in trading action and the number of insiders from 2004 to 2006
	Test 2:Linear Regression	Explain the relation between accruals and directors activity
	Test 3:Linear Regression	Explore any relation between insider trading and abnormal returns
H3: Under IFRS firms exhibit lower cost of equity, without resorting to earnings management procedures.	Test 1:Binary Logistic Regression	Exhibit the cost of equity performance
	Test 2:Linear Regression	Describe any relationship between accruals and cost of equity capital
	Test 3:Linear Regression	Detect any correlation between the cost of capital abnormal returns
H4: The SEC's acceptance decision to allow IFRS for foreign firms has increased the proportion of the converging process.	Test: Indexes Calculation	Examine the proportion of the convergence process after SEC's decision
H5: Financial statement effects under IFRS for firms that used to follow US GAAP.	Test 1:Binary Logistic Regression	Financial statement effects from 2006-2008
	Test 2:Analysis of Variance	Detect volatility cases in accounting measures
H6: Under IFRS, firms listed in US markets tend to exhibit less earnings management.	Test 1:Analysis of Variance	Explore the volatility of ΔNP/TA & ΔNP/ΔOCF measures
	Test 2a:Pearson Correlation	Follow the correlation between accruals (DAC) and operating cash flows (OCF)
	Test 2b:Linear Regression	Focus on explanatory power of the R^2
	Test 2c:Linear Regression	Examine the relation between accruals and profitability, leverage and size ratios
	Test 3a,b:Binary Logistic Regression	Explore the performance of SPP and LNL cases under IFRS
H7: The outbreak of the crisis has negatively affected stock performance in the banking and insurance sector in Europe, Australia and the US.	Test: Market Model	Calculate any firm's abnormal returns against a specific event
H8: The use of the reclassification option has resulted in financial statement effects, increasing accruals in many cases, but adding market value.	Test 1:Multinomial Logistic Regression	Effects after the reclassification option for reclassified, non-reclassified and US firms (three categories)
	Test 2a:Binary Logistic Regression	Detect any decrease of accruals for reclassified companies
	Test 2b:Linear Regression	Observe the performance of accruals for all three firms' categories
	Test 3: Linear Regression	Detect the market reaction to the announcement of the reclassification option
H9: The amendments of both IFRS and US GAAP, have improved the accuracy of the shadow banking sector.	Test 1a:Analysis of Variance	Detect volatility cases in accounting measures. The higher the volatility, the lower the information asymmetry
	Test 1b:Linear Regression	Focus on explanatory power of the R^2
	Test 2:Binary Logistic Regression	Explore the impact of the accounting

		improvements on firms' value
	Test 3a:Pearson Correlation	Explore the correlation between discretionary accruals (DAC) and cash flows from operating activities (OCF)
	Test 3b:Binary Logistic Regression	Examine accruals performance before and after the amendments
	Test 3c:Linear Regression	Calculate the explanatory power of the R^2

Table 6 – Timetable of IFRS standards and amendments

Pronouncement	**Issued Date**	**Effective date**
IFRS 1 *First-time Adoption of International Financial Reporting Standards*		
Original issue	2003	First IFRS financial statements for a period beginning on or after 1 January 2004
Amendment relating to IFRS 6	2005	Annual periods beginning on or after Jan. 2006
Amendment relating to cost of an investment on first-time adoption	May 2008	Annual periods beginning on or after Jan. 2009
Revised and restructured	Nov. 2008	Annual periods beginning on or after July 2009
Amendments relating to oil and gas assets and lease.	July 2009	Annual periods beginning on or after Jan. 2010
Limited Exemption from Comparative IFRS 7 Disclosures for First-time Adopters	January 2010	Annual periods beginning on or after July 2010
Annual Improvements to IFRSs	May 2010	Annual periods beginning on or after Jan. 2011
Replacement of 'fixed dates' for certain exceptions with 'the date of transition to IFRSs'	Dec. 2010	Annual periods beginning on or after 1 July 2011
Additional exemption for entities ceasing to suffer from severe hyperinflation	Dec. 2010	Annual periods beginning on or after 1 July 2011
Amendments for government loans with a below-market rate of interest when transitioning to IFRSs	March 2012	Annual periods beginning on or after 1 January 2013
Annual Improvements 2009-2011 Cycle	May 2012	Annual periods beginning on or after 1 January
Annual Improvements 2011-2013 Cycle	Dec. 2013	Amendment to the basis for conclusions only
IFRS 2 *Share-based Payment*		
Original issue	2004	Annual periods beginning on or after 1 January
Amendment relating to vesting conditions and cancellations	2008	Annual periods beginning on or after 1 January 2009
Amendments resulting from April 2009 Annual Improvements to IFRSs	April 2009	Annual periods beginning on or after 1 July 2009
Amendments relating to group cash-settled share-based payment transactions	June 2009	Annual periods beginning on or after 1 January 2010
Annual Improvements 2010-2012 Cycle	Dec. 2013	Annual periods beginning on or after 1 July 2014
IFRS 3 *Business Combinations*		
Original issue	2004	Business combinations after 31 March 2004
Comprehensive revision on applying the acquisition method	2008	Annual periods beginning on or after 1 July 2009
Amendments resulting from May 2010 Annual Improvements to IFRSs	May 2010	Annual periods beginning on or after 1 July 2010
Annual Improvements 2010-2012 Cycle	Dec. 2013	Annual periods beginning on or after 1 July 2014
Annual Improvements 2011-2013 Cycle	Dec. 2013	Annual periods beginning on or after 1 July 2014
IFRS 4 *Insurance Contracts*		
Original issue	2004	Annual periods beginning on or after 1 January
Amendment for financial guarantee contracts	2005	Annual periods beginning on or after 1 January
IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*		
Original issue	2004	Annual periods beginning on or after 1 January
Amendments resulting from May 2008 Annual Improvements to IFRSs	May 2008	Annual periods beginning on or after 1 July 2009
Amendments resulting from April 2009 Annual Improvements to IFRSs	April 2009	Annual periods beginning on or after 1 January 2010
Amendments resulting from September 2014 Annual Improvements to IFRSs	Sept. 2014	Annual periods beginning on or after 1 January 2016
IFRS 6 *Exploration for and Evaluation of Mineral Assets*		
Original issue	2004	Annual periods beginning on or after 1 January
IFRS 7 *Financial Instruments: Disclosures*		

Original issue	2005	Annual periods beginning on or after 1 January
Amendments enhancing disclosures about fair value and liquidity risk	March 2009	Annual periods beginning on or after 1 January 2009
Amendments resulting from May 2010 Annual Improvements to IFRSs	May 2010	Annual periods beginning on or after 1 January 2011
Amendments enhancing disclosures about transfers of financial assets AASB 2010-6 - Amendments to Australian–Disclosures on Transfers of Financial Assets	October 2010 November 2010	Annual periods beginning on or after 1 July 201 Annual periods beginning on or after September 2011
Amendments related to the offsetting of assets and liabilities	Dec. 2011	Annual periods beginning on or after 1 January 2013 and interim periods within those periods
Deferral of mandatory effective date of IFRS 9 and amendments to transition disclosures	Dec. 2011	Annual periods beginning on or after 1 January 2015
Additional hedge accounting disclosures (and consequential amendments) resulting from the introduction of the hedge accounting chapter in IFRS 9	Nov. 2013	Applies when IFRS 9 is applied
Amendments resulting from September 2014 Annual Improvements to IFRSs	Sept. 2014	Annual periods beginning on or after 1 January 2016
IFRS 8 *Operating Segments*		
Original issue	2006	Annual periods beginning on or after 1 January
Amendments resulting from April 2009 Annual Improvements to IFRSs	April 2009	Annual periods beginning on or after 1 January 2010
Annual Improvements 2010-2012 Cycle	Dec. 2013	Annual periods beginning on or after 1 July 2014
IFRS 9 *Financial Instruments*		
Original issue (Classification and measurement of financial assets)	Nov. 2009	Annual periods beginning on or after 1 January 2013
Reissue to include requirements for the classification and measurement of financial liabilities and incorporate existing derecognition requirements	October 2010	Annual periods beginning on or after 1 January 2013 *(For annual reports beginning on or after the end of 2012 for Australian companies, AASB9)*
Deferral of mandatory effective date of IFRS 9 and amendments to transition disclosures	Dec. 2011	Annual periods beginning on or after 1 January 2015
Reissue to incorporate a hedge accounting chapter and permit the early application of the requirements for presenting in other comprehensive income the 'own credit' gains or losses on financial liabilities designated under the fair value option without early applying the other requirements of IFRS 9	Nov. 2013	Contains no stated effective date
Finalised version, incorporating requirements for classification and measurement, impairment, general hedge accounting and derecognition.	July 2014	Effective for annual periods beginning on or after 1 January 2018
IFRS 10 *Consolidated Financial Statements*		
Original issue	May 2011	Annual periods beginning on or after 1 January 2013
Amendments to transitional guidance	June 2012	Annual periods beginning on or after 1 January 2013
Amendments for investment entities	October 2012	Annual periods beginning on or after 1 January 2014
Amendments regarding the application of the consolidation execption	Dec. 2014	Annual periods beginning on or after 1 January 2016
Amendments deferring the effective date of the September 2014 amendments	Dec. 2015	Immediately

IFRS 11 *Joint Arrangements*		
Original issue	May 2011	Annual periods beginning on or after 1 January 2013
Amendments to transitional guidance	June 2012	Annual periods beginning on or after 1 January 2013
Amendments regarding the accounting for acquisitions of an interest in a joint operation	May 2014	Annual periods beginning on or after 1 January 2016
IFRS 12 *Disclosure of Interests in Other Entities*		
Original issue	May 2011	Annual periods beginning on or after 1 January 2013
Amendments to transitional guidance	June 2012	Annual periods beginning on or after 1 January 2013
Amendments for investment entities	October 2012	Annual periods beginning on or after 1 January 2014
Amendments regarding the application of the consolidation execption	Dec. 2014	Annual periods beginning on or after 1 January 2016
IFRS 13 *Fair Value Measurement*		
Original issue	May 2011	Annual periods beginning on or after 1 January 2013
Annual Improvements 2010-2012 Cycle	Dec. 2013	Amendments to basis for conclusions only
Annual Improvements 2011-2013 Cycle	Dec. 2013	Annual periods beginning on or after 1 July 2014
IFRS 14 *Regulatory Deferral Accounts*		
Original issue	January 2014	Applies to an entity's first annual IFRS financial statements for a period beginning on or after 1 January 2016
IFRS 15 *Revenue from Contracts with Customers*		
Original issue	May 2014	Applies to an entity's first annual IFRS financial statements for a period beginning on or after 1 January 2017 2018 (see below)
Amendments to defer the effective date to 1 January 2018	Sept. 2015	Annual periods beginning on or after 1 January 2018

Source: http://www.iasplus.com/en/standards/effective-dates/effective-ifrs

Table 7 - Summary of key differences between IFRS and old GAAP from UK, Germany, Greece and Australia

Topics	IFRS	UK GAAP	German GAAP	Greek GAAP	Australian GAAP
Financial statements	Requires: (a) statement of financial position, (b) statement of comprehensive income (presented as either a single statement or an income statement followed by a statement of other comprehensive income), (c) cash flow statement, (d) statement of changes in equity (presenting a reconciliation of equity items between the beginning and end of the period) and (e) notes.	Requires: (a) balance sheet, (b) profit and loss account, (c) statement of total recognised gain and losses, (d) cash flow statement and (e) notes comprising a summary of the accounting policies, estimations and additional information.	Requires: (a) Balance sheet, (b) profit and loss account, (c) notes. Medium-sized and large entities are required additionally to present a (d) management report. For publicly traded companies, the preparation of a cash (e) flow statement and a (f) statement of changes in equity is required.	Requires: (a) Balance sheet (b) profit and loss account (c) cash flow statement and (d) notes. There is no separate statement of changes in equity, but there is an indirect reference of it in the earnings' distribution table	Requires similar to IFRS statements, although referred to by different names, as for example the statement of financial performance is the IFRS income statement.
Statement of cash flows	Requires a number of disclosures, but does not prescribe the exact line items in the statement. Interest and dividends may be classified as operating or as investing (if received) or financing (if paid). Taxes usually are classified as operating. Cash flows from extraordinary items are classified as operating, investing or financing as appropriate.	Requires the movement of cash (defined as cash in hand and deposits repayable on demand, less overdrafts) to be reported in the cash flow statement. There is no concept of 'cash equivalents'. Cash flows are reported in greater detail (under nine standard headings) than under IFRS.	A statement of cash flows is required only for listed companies. A specific format of the statement of cash flows is required. Cash flows from interest received and paid, dividends received and income taxes generally are classified as cash flows from operating activities. Cash flows from extraordinary items are classified	A statement of cash flows is required only for listed companies and has a specific format and specific disclosure requirements.	Similar to IFRS. Additional disclosures are required along with a number of filters. They are categorised in numerical order. There are listed AUS specific paragraphs and AASB interpretations.
Statement of Income	Does not prescribe a standard format, although expenditure must be presented in one of two formats (function or nature). Certain items must be presented on the face of the income statement. Extraordinary items are not segregated.	Company law specifies four alternative formats. Extra-ordinary items are nonexistent by virtue of their definition.	The income statement is presented in one of two prescribed formats. Generally only realised gains may be recognised in the income statement. Items of income and expense cannot be offset.	There is specific format and required information disclosed.	There is specific format and required information disclosed.
Consolidation	Consolidation is based on the power to control. A subsidiary is not consolidated if it is acquired and held exclusively for disposal in the near future, or if severe long-term restrictions significantly impair the transfer of funds to the parent. Subsidiaries cannot be excluded on the basis of dissimilar activities.	Subsidiaries must be excluded from consolidation where severe long-term restrictions substantially hinder the exercise of the rights of the parent over the assets or management of the subsidiary, or the parent's interest is being held exclusively with a	Consolidation can be based on actual control in practice. A subsidiary is excluded if its operations are so different from those of the rest of the group that consolidation would impair fair presentation	Are only consolidated the subsidiary companies with same activity.	No specific exclusions, but may be able to exclude entities that operate under severe longterm restrictions if ability to control is impaired.

		view to resale.			
Tangible and intangible fixed assets	For tangible and intangible assets, there is an accounting policy choice between the cost model and the revaluation (fair value) model. Intangibles with indefinite live are reviewed annually for impairment and are not amortised. Non financial assets with definite live are amortised and tested for impairment only where there is an indication of impairment.	A cost or valuation model may be used for tangible and intangible assets; but a valuation model may only be used where an intangible asset has a readily ascertainable market value. There is a rebuttable presumption that goodwill and intangible assets have a useful economic life of 20 years.	Internally generated intangible assets, including development costs, cannot be capitalised. Amortisation is tax driven and not necessarily based on the useful life of an asset. Revaluations are not permitted.	Tangible and intangible assets are recognised at cost. Revaluation is possible only for land and buildings, which allows revaluation every 4 years following indices provided by Law. The increase in value is recognised within equity as the company issues free shares to the shareholders. The Law does not consider indefinite useful life.	Tangibles and intangibles can choose between cost and fair value. It is not permitted an asset to be carried at deemed cost, being the previous revalued, it the entity reverts from the fair value to the cost basis. The reversal of a decrease previously recognised as an expense in respect of the same class of asset is recognised as income. There is no limitation on the recognition of the fair value of an intangible provided that the fair value is reliably measurable.
Asset Impairment	Impairment exists if an assets carrying amount exceeds the greater of its net selling price and value in use (net present value of future cash flows); this excess is the amount of the impairment loss. Detailed guidance provided for calculating the impairment of an asset particularly when such assessment has to be done by cash generating unit rather than individual asset.	Impairment is measured for an income-generating unit when indicators of impairment exist. Non-financial assets are tested for impairment only if there is an indication of impairment. All impairment losses (including on goodwill) may be reversed in future periods if relevant criteria are met.	A compulsory impairment exists only if the carrying amount of a fixed asset permanently exceeds its current value.	Greek GAAP require a company to recognise impairments of assets. If an asset is considered to be permanently impaired, the impairment is recognised so that the asset's value is shown at the lower of cost and fair value. This impairment can be reversed. The reversal is optional and is treated as exceptional revenue.	There is no detailed guidance for calculating the impairment of an asset. Entities entering the development stage are not tested for impairment. Recoverable amount is defined as the amount that is expected to be recovered through cash inflows and outflows from the continued use and subsequent disposal of the asset. An impairment write-down should be recognised as an expense in so far as it exceeds the amount held in the revaluation surplus relating to the same asset.
Depreciation	Allows straight-line, units of production and both accelerated methods. Component depreciation required when asset components have different benefit patterns. Depreciation is based on the useful life of an asset.	There is no requirement to separately depreciate parts of an asset. Depreciation ceases at the end of the useful life or on disposal of the asset. If no depreciation is charged (as immaterial) or the remaining useful life of asset exceeds 50 years, a mandatory annual impairment review is required.	Depreciation is tax driven and not necessarily based on the useful life of an asset.	The coefficient of annual depreciation that use the enterprises are determined by Law. These indices are not in line with the assets' useful life.	The Standard requires non-current assets that have limited useful lives (depreciable assets) to be depreciated over those useful lives and specifies the manner in which this is to be done.
Goodwill	Require capitalizing the goodwill and	Goodwill is amortised over 20	Goodwill is recognised as	It is valued similarly to IFRS and it is	Capitalised and amortised over its

	amortizing it over a period not to exceed 20 years, along with an annual test for impairment. IFRS permits the charging of goodwill to owners' equity in the year of acquisition. Negative goodwill is recognised immediately. Impairment losses on goodwill are not reversed. Any negative goodwill is recognised in profit or loss in the period in which the non-monetary assets are recovered, with any excess recognised over the period expected to benefit.	years and tested for impairment annually. Goodwill with an indefinite life is not amortised. Any negative goodwill is recognised in profit or loss in the period in which the non-monetary assets are recovered, with any excess recognised over the period expected to benefit.	an intangible asset with a finite useful life. For all subsidiaries where goodwill has been charged to group equity in accordance with the prior choice for the treatment of goodwill, this treatment may be retained. It may be written off against equity.	depreciated only once. Goodwill arising on an acquisition should either be expensed in the period incurred or amortised in equal tranches over a maximum period of 5 years.	useful life, but this period cannot exceed 20 years. Straight-line basis of amortisation required. Negative goodwill must be accounted for by reducing proportionately the fair values of the non-monetary assets acquired. Any remaining balance must be recognised as revenue in the profit and loss account. Reversal of the impairment of goodwill is not permitted.
Research & Development	Expense research costs as incurred. Development costs must be capitalised and amortised where stringent criteria are met.	Similar to IFRS, although development costs may be expensed as incurred. They may be capitalised and amortised if specific criteria are met (as an accounting policy choice).	R&D costs are excluded from capitalization.	R&D is posted in the account of expenses, similarly with the expenses of growth. They can also be recognised as intangible assets and are amortised over a period of 3 years. The Law does not explicitly distinguish between research and development phases and permits capitalisation of both.	R&D can only be separately recognised as part of an acquisition where research and development costs are expected beyond any reasonable doubt to be recoverable.
Inventories	Payments received on account of orders are recognised as liabilities. The determination of net realisable value is based on the estimated selling price. Carry at lower of cost and net realisable value. Use FIFO or weighted average method to determine cost. LIFO is prohibited. Reversal is required for subsequent increase in value of previous write-downs.	Similar to IFRS with the exception of use of net realisable value for agricultural and forest products and mineral ores where there is no similar exclusion from scope in SSAP 9.	Payments received on account of orders may be deducted from inventories. Purchase market prices generally are considered to be more relevant than sales market prices in assessing the current market price (net realisable value) of inventory.	LIFO is permitted. Write-downs of inventories are not recognised but disclosed in the notes.	Similar to IFRS, with some minor differences with respect to disclosure, while LIFO is also permitted.
Revenue Recognition	Revenue recognition generally is based on the substance of an arrangement. Not specific about the timing and measurement of recognition; lacks industry-specific guidance. Based on several criteria, which require the recognition of revenue	Revenue arising in an exchange transaction with a customer, e.g., on the sale of goods, should be recognised when the entity has the right to consideration in exchange for its performance. Basic principles underlying revenue recognition are generally similar,	The legal structure of a transaction is more important than under IFRS. Revenue from construction and fixed price service contracts generally are recognised using the completed contract method. There is no specific guidance on advertising barter	They recognize revenue when there is a transaction of a good or a service regardless on whether this transaction is paid or not.	Based on the transfer of control. Proceeds from disposal recognised as a component of revenue.

	when risks and rewards have been transferred and the revenue can be measured reliably.	but less prescriptive.	transactions.		
Earning-per-Share	Does not average the individual interim period calculations. Basic and diluted EPS must be disclosed on the face of the income statement. Use weighted average potential dilutive shares as denominator for diluted EPS. Use 'treasury share' method for share options/ warrants.	Similar to IFRS. Listed are required to disclose earnings per share in their financial statements. It uses weighted average of ordinary shares.	EPS is not required to be disclosed.	EPS is not required to be disclosed.	Similar to IFRS. They additionally state that potential ordinary shares resulting from mandatory conversion of share capital are always considered dilutive.
Deferred income taxes	Deferred tax is recognised on all temporary differences between the tax base and carrying value of assets and liabilities, including those arising from revaluation of assets, on gains rolled over into replacement assets and on unremitted earnings of investments where the Group does not control the timing of distributions.	Deferred tax is provided on all timing differences, subject to certain exceptions. Accordingly, deferred tax is not provided on revaluation gains and gains rolled over into replacement assets unless there exists a binding agreement for sale, nor on unremitted earnings of investments except to the extent of accrued dividends or where there exists a binding agreement to distribute earnings.	Deferred tax is provided in respect of timing differences, which are focused on the income statement. In practice deferred tax assets, seldom are recognised. In practice deferred tax often is provided using an enterprise's average effective tax rate rather than the statutory rate. Deferred tax cannot be recognised directly in equity.	There is no distinction between current and deferred tax. The concept of deferred tax does not exist.	Income Statement Approach is used for provision for all timing differences. Realisation of a deferred tax benefit for all timing differences must be regarded as being assured beyond reasonable doubt.
Foreign exchange adjustments	Do not specify an accounting method. IFRS permit a choice between current and historical exchange rates.	A transaction that is to be settled at a contracted rate is translated at that rate, and where a trading transaction is covered by a related or matching forward contract, the rate of exchange specified in that contract may be used. With separate predictions according to the nature of the transaction.	Foreign currency monetary items, and foreign currency non-monetary items carried at fair value following a write-down, are not retranslated if this would lead to the recognition of unrealised gains.	Foreign exchange adjustments are carried at fair value and classified on either on expenses account, on passive or on profit and loss account.	Foreign currency transactions carried at current spot rate with exchange differences and costs or gains on entering the hedge deferred as an asset or liability until the transaction occurs. Hedge of net investment are similar to IFRS, except no requirement to account for any ineffectiveness separately.
Pensions	Permit the use of both accrued-benefit and projected benefit valuation methods and require the use of long-term assumptions. They have no requirement to recognize any liability for under funded plans. The cost of providing defined benefit retirement benefits is	The cost of retirement benefits based upon a consistent percentage of employees' pensionable pay as recommended by independent qualified actuaries. Variations in regular pension costs are amortised over the average expected service life	Valuations for defined benefit plans should be done annually and must be based on conditions at the balance sheet date. Consideration of future developments such as future salaries is not permitted. The interest rate used for	The enterprise is compelled to accounting forecasts for personnel with rights of retirement, as it has the obligation to pay a lump sum to the employees who are made redundant or retire, depending on the service years, the salary etc. These	There is currently no Australian accounting standard that deals with accounting for retirement benefits and an expense is generally brought to account as contributions are paid to the fund.

	recognised over the service life of scheme members. This cost is calculated by an independent qualified actuary, based on estimates of long-term rates of return on scheme assets and discount rates on scheme liabilities.	of current employees on a straight line basis. Scheme assets and liabilities are not recognised on the Group's balance sheet.	discounting by most enterprises is six per cent due to tax rules. There is no guidance in respect of plan assets. Actuarial gains and losses are recognised immediately as expense or income.	liabilities are definition under Greek law and should be recognised in the balance sheet.	
Assets held for sale	Assets are classified as held for sale when their value will be recovered through a sale transaction rather than continuing use and its sale is considered highly probable. Financial assets held for trading purposes carried at fair value with unrealised gains and losses recognised in profit or loss.	There is no held for sale definition and no reclassification is required.	No specific regulations	No specific regulations	No specific guidance. Financial assets are generally not carried at fair value unless they are trading assets or are noncurrent assets being revalued through the asset revaluation reserve. Where revalued assets are sold, the asset revaluation reserve is not recognised in current profit or loss but may be transferred to retained earnings.
Discontinued operations	Under IFRS, the results of operations arising from assets classified as held for sale are classified as discontinued operations when the results relate to a separate line of business, or geographical area of operations, or where there is a coordinated plan to dispose of a separate line of business or geographical area of operations.	Operations are classified as discontinued when the sale or termination of operations is completed in the reporting period, or before approval of the financial statements. In addition, the operations concerned must have a material effect on the nature and focus of operations resulting in either a withdrawal from a particular class of business or geographical market or a material reduction in turnover in a continuing market.	There is no concept of discontinuing operations. A gain/ loss on the sale or abandonment of a major part of an enterprise sometimes is presented as an extraordinary item.	There is no concept of discontinuing operations.	They don't prohibit a discontinuing operation from being classified as an extraordinary item and don't requires the amount of gain or loss before income tax expense/revenue recognised on disposal of assets or settlement of liabilities attributed to each discontinuing operation to be disclosed on the face of the statement of financial performance.
Dividends	Dividends are recognised as an appropriation of reserves in the period in which they are approved.	Dividends are recognised as an expense in the period in which they are declared.	The disclosure of dividends generally comprises only dividends paid. A simple proposal of dividend is not generally sufficient for recognition of the related liability.	Dividends recognised when proposed and are recognised as a liability.	A liability must be recognised for dividends declared, determined or publicly recommended on or before the reporting date.
	Source: Ernst & Young Global Limited and PwC	Source: Ernst & Young Global Limited and PwC	Source: KPMG	Source: Ernst & Young Global Limited	Source: Delloitte

Table 8 - Summary of key differences and impacts between IFRS and US GAAP

	US GAAP	IFRS	Impact
Inventory Valuation	Permit LIFO, FIFO, weighted average cost, or specific identification. Inventory carried at lower of cost or market.	Permits FIFO or weighted average cost; LIFO not permitted.Inventory carried at lower of cost or net realizable value.	Companies that use LIFO must revalue inventory, which could result in major tax liabilities due to the IRS's LIFO conformity rule.
Asset Impairment	Two-step impairment.	Single-step impairment.	Write-downs are more likely under IFRS.
Goodwill	Until recently, required capitalizing goodwill and amortizing it over a period not to exceed 40 years. The goodwill must be reviewed for impairment each year.	Require capitalizing the goodwill and amortizing it over a period not to exceed 20 years, along with an annual test for impairment. IFRS permits the charging of goodwill to owners' equity in the year of acquisition.	Additional differences in the impairment testing methodologies could create further variability in the timing and extent of recognized impairment losses.
Asset Valuation	Assets can be written down, but not written up. PP&E is valued at historical cost.	Allows upward revaluation when an active market exists for intangibles; allows revaluation of PP&E to fair value.	Book values are likely to increase under IFRS. This upward revision would also result in additional depreciation expense.
Depreciation	Methods allowed: straight-line, units of production, or accelerated methods (sum of digits or declining balance). Component depreciation allowed but not commonly used.	Allows straight-line, units of production, and both accelerated methods. Component depreciation required when asset components have different benefit patterns.	Assets with different components will have differing depreciation schedules, which may increase or decrease assets and revenue.
Contingencies	Contingent liabilities must be disclosed.	Can limit disclosure of contingent liabilities if severely prejudicial to an entity's position.	May result in fewer disclosures.
Debt Covenants	Permits curing debt covenant violations after fiscal year end.	Debt covenant violations must be cured by fiscal year end.	Debt covenants may need to be amended, resulting in related transaction costs.
Research & Development	R&D costs must be expensed under U.S. GAAP.	Allows capitalization of R&D costs if certain criteria are met.	Development costs will be deferred and amortized.
Entity Consolidation	Consolidation is based on who has the controlling financial interest. Prefer a risks-and-rewards model	Consolidation is based on which entity has the power to control. Prefer a control model. Some entities have to be shown separately under IFRS.	Companies are likely to consolidate more entities.
Securitization	Allows certain securitized assets and liabilities to remain off a corporation's books.	IFRS requires most securitized assets and liabilities to be placed on the balance sheet.	May result in very different balance sheet values.
Financial Instrument Valuation	Fair value based on a negotiated price between a willing buyer and seller; not based on entry price.	Several fair value measurements. Fair value generally seen as the price at which an asset could be exchanged.	Financial assets and liabilities will be measured differently.
Statement of Income	Extraordinary items shown below the net income.	Extraordinary items are not segregated in the income statement.	Under IFRS an entity can present expenses based on their nature or their function.
Revenue Recognition	Provides very specific general and industry guidance about what constitutes revenue, how revenue should be	Not specific about the timing and measurement of recognition; lacks industry-specific guidance.	Revenues are likely to increase with less detailed guidance.

	measured, and the effect of timing on recognition.		
Earning-per-Share	U.S. GAAP averages the individual interim period incremental shares.	IFRS does not average the individual interim period calculations	This difference could result in different denominators being utilized in the diluted earnings-per-share (EPS) year-to-date period calculation.
Deferred income taxes	Require recognition of deferred income taxes on a comprehensive basis for all temporary differences and require the use of tax rates that reflect future tax rates and laws.	Allow managers not to recognize deferred assets/ liabilities if the book/tax difference is not expected to reverse in the foreseeable future. Also allow managers to choose whether or not to adjust deferred amounts for changes in tax rates and laws.	Companies reporting under IFRS generally will have greater volatility in their deferred tax accounts over the life of the awards due to the related adjustments for stock price movements in each reporting period. Companies reporting under US GAAP could have greater volatility upon exercise arising from the variation between the estimated deferred taxes recognized and the actual tax deductions realized.
Foreign exchange adjustments	Foreign exchange gains and losses on forward contracts and hedges are recognized in net income or a component of equity in the period in which they occur. The United States requires the use of the current exchange rate when translating goodwill and fair value adjustments on foreign acquisitions.	Do not specify an accounting method. IFRS permit a choice between current and historical exchange rates.	The treatment of foreign exchange gains and losses on available-for-sale debt securities will create more income statement volatility under IFRS.
Pensions	Require the use of the accrued-benefit method and current market-based assumptions. They require recognition of a minimum pension liability for under funded plans.	Permit the use of both accrued-benefit and projected benefit valuation methods and require the use of long-term assumptions. They have no requirement to recognize any liability for under funded plans.	May result in an increased benefit obligation under IFRS.

Source: PricewaterhouseCoopers LLP and KPMG

Table 9 - Key US GAAP amendments 2009-2015

Update Number	Pronouncement	Effective date for public companies
Updates Issued in 2009		
No.2009–01	Topic 105 - Generally Accepted Accounting Principles: Statement of Financial Accounting Standards No. 168	For interim and Annual periods ending after 15 September 2009
No. 2009–05	Topic 820 - Fair Value Measurements and Disclosures: Measuring Liabilities at Fair Value	For the first reporting period beginning after issuance.
No. 2009-06	Topic 740 - Income Taxes: Implementation Guidance on Accounting for Uncertainty in Income Taxes and Disclosure	For interim and Annual periods ending after 15 September 2009
No. 2009-12	Topic 820 - Fair Value Measurements and Disclosures: Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)	For interim and Annual periods ending after 15 December 2009
No. 2009-13	Topic 605 - Revenue Recognition: Multiple-Deliverable Revenue Arrangements — a consensus of the FASB Emerging Issues Task Force	Beginning on or after 15 June 2010
No. 2009-14	Topic 985 - Software: Certain Revenue Arrangements That Include Software Elements — a consensus of the FASB Emerging Issues Task Force	Beginning on or after 15 June 2010
No. 2009-16	Topic 860 - Transfers and Servicing: Accounting for Transfers of Financial Assets	December 2009
No. 2009-17	Topic 810 - Consolidations: Improvements to Financial Reporting by Enterprises Involved with Variable Interest Entities	December 2009
Updates Issued in 2010		
No. 2010-01	Topic 505 - Equity: Accounting for Distributions to Shareholders with Components of Stock and Cash	For interim and Annual periods ending on or after 15 December 2009
No. 2010-02	Topic 810 - Consolidation: Accounting and Reporting for Decreases in Ownership of a Subsidiary	Beginning in the period that an entity adopts Statement 160 or for interim or annual reporting period ending on or after 15 December 2009 for first statement 160 users
No. 2010-03	Topic 932 - Extractive Activities: Oil and Gas Reserve Estimation and Disclosures	For interim and Annual periods ending on or after 31 December 2009
No. 2010-05	Topic 718 - Stock Compensation: Escrowed Share Arrangements and the Presumption of Compensation	From 15 January 2010
No. 2010-06	Topic 820 - Fair Value Measurements and Disclosures: Improving Disclosures about Fair Value Measurements	For interim and Annual periods ending on or after 15 December 2009
No. 2010-07	Topic 958 - Not-for-Profit Entities: Not-for-Profit Entities: Mergers and Acquisitions	From January 2010
No. 2010-09	Topic 855 - Subsequent Events: Amendments to Certain Recognition and Disclosure Requirements	For interim and Annual periods ending on or 15 June 2010
No. 2010-10	Topic 810 - Consolidation: Amendments for Certain Investment Funds	For interim and Annual periods ending on or 15 November 2009
No. 2010-11	Topic 815 - Derivatives and Hedging: Scope Exception Related to Embedded Credit Derivatives	For interim and Annual periods ending on or 15 June 2010
No. 2010-12	Topic 740 - Income Taxes: Accounting for Certain Tax Effects of the 2010 Health Care Reform Acts	From April 2010
No. 2010-13	Topic 718 - Stock Compensation: Effect of Denominating the Exercise Price of a Share-Based Payment	For interim and Annual periods ending on or after 15 December 2010
No. 2010-15	Topic 944 - Financial Services and Insurance: How Investments Held through Separate Accounts Affect an Insurer's Consolidation Analysis of Those Investments	For interim and Annual periods ending on or after 15 December 2010

No. 2010-16	Topic 924 - Entertainment: Accruals for Casino Jackpot Liabilities	For interim and Annual periods ending on or after 15 December 2010
No. 2010-17	Topic 605 - Revenue Recognition - Milestone Method: Milestone Method of Revenue Recognition	For interim and Annual periods ending on or 15 June 2010
No. 2010-18	Topic 310 - Receivables: Effect of a Loan Modification When the Loan Is Part of a Pool	For interim and Annual periods ending on or 15 July 2010
No. 2010-19	Topic 830 - Foreign Currency: Foreign Currency Issues	From November 2010
No. 2010-20	**Topic 310 - Receivables: Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses**	**For interim and Annual periods ending on or after 15 December 2010**
No. 2010-23	Topic 954 - Health Care Entities: Measuring Charity Care for Disclosure Issues Task Force	For interim and Annual periods ending on or after 15 December 2010
No. 2010-24	Topic 954 - Health Care Entities: Presentation of Insurance Claims and Related Insurance Recoveries	For interim and Annual periods ending on or after 15 December 2010
No. 2010-25	Topic 962 - Plan Accounting - Defined Contribution Pension Plans: Reporting Loans to Participants by Defined Contribution Pension Plans	For interim and Annual periods ending on or after 15 December 2010
No. 2010-26	Topic 944 - Financial Services - Insurance: Accounting for Costs Associated with Acquiring or Renewing Insurance Contracts	For interim and Annual periods ending on or after 15 December 2011
No. 2010-27	Topic 720 - Other Expenses: Fees Paid to the Federal Government by Pharmaceutical Manufacturers	For interim and Annual periods ending on or after 31 December 2010
No. 2010-28	Topic 350 - Intangibles—Goodwill and Other: When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts	For interim and Annual periods ending on or after 15 December 2010
No. 2010-29	**Topic 805 - Business Combinations: Disclosure of Supplementary Pro Forma Information for Business Combinations**	**For interim and Annual periods ending on or after 15 December 2010**
Updates Issued in 2011		
No. 2011-01	Topic 310 - Receivables: Deferral of the Effective Date of Disclosures about Troubled Debt Restructurings in Update No. 2010-20	Effective upon issuance
No. 2011-02	Topic 310 - Receivables: A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring	For interim and Annual periods ending on or 15 June 2011
No. 2011-03	Topic 860 - Transfers and Servicing: Reconsideration of Effective Control for Repurchase Agreements	For interim and Annual periods ending on or after 15 December 2011
No. 2011-04	Topic 820 - Fair Value Measurement: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs	For interim and Annual periods ending on or after 15 December 2011
No. 2011-05	Topic 220 - Comprehensive Income: Presentation of Comprehensive Income	For interim and Annual periods ending on or after 15 December 2011
No. 2011-06	Topic 720 - Other Expenses: Fees Paid to the Federal Government by Health Insurers	For interim and Annual periods ending on or after 31 December 2013
No. 2011-07	Topic 954 - Health Care Entities: Presentation and Disclosure of Patient Service Revenue, Provision for Bad Debts and the Allowance for Doubtful Accounts for Certain Health Care Entities	For interim and Annual periods ending on or after 15 December 2011
No. 2011-08	Topic 350 – Intangibles - Goodwill and Other: Testing Goodwill for Impairment	For interim and Annual periods ending on or after 15 December 2011
No. 2011-09	Subtopic 715-80 – Compensation - Retirement Benefits - Multiemployer Plans: Disclosures about an Employer's Participation in a Multiemployer Plan	For interim and Annual periods ending on or after 15 December 2011

No. 2011-10	Topic 360 - Property, Plant, and Equipment: Derecognition of in Substance Real Estate—a Scope Clarification	For interim and Annual periods ending on or after 15 June 2012
No. 2011-11	Topic 210 - Balance Sheet: Disclosures about Offsetting Assets and Liabilities	For interim and Annual periods ending on or after 01 January 2013
No. 2011-12	Topic 220 - Comprehensive Income: Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05	For interim and Annual periods ending on or after 15 December 2011
Updates Issued in 2012		
No. 2012-01	Topic 954 - Health Care Entities: Continuing Care Retirement Communities—Refundable Advance Fees	For interim and Annual periods ending on or after 15 December 2012
No. 2012-02	Topic 350 - Intangibles—Goodwill and Other: Testing Indefinite-Lived Intangible Assets for Impairment	For interim and Annual periods ending on or after 15 September 2012
No. 2012-05	Topic 230 - Statement of Cash Flows: Not-for-Profit Entities: Classification of the Sale Proceeds of Donated Financial Assets in the Statement of Cash Flows	For interim and Annual periods ending on or after 15 June 2013
No. 2012-06	Topic 805 - Business Combinations : Subsequent Accounting for an Indemnification Asset Recognized at the Acquisition Date as a Result of a Government-Assisted Acquisition of a Financial Institution	For interim and Annual periods ending on or after 15 December 2012
No. 2012-07	Topic 926 – Entertainment-Films: Accounting for Fair Value Information That Arises after the Measurement Date and Its Inclusion in the Impairment Analysis of Unamortized Film Costs	For interim and Annual periods ending on or after 15 December 2012
Updates Issued in 2013		
No. 2013-01	**Topic 210 - Balance Sheet: Clarifying the Scope of Disclosures about Offsetting Assets and Liabilities**	**For interim and Annual periods ending on or after 01 January 2013**
No. 2013-02	Topic 220 - Comprehensive Income: Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income	For interim and Annual periods ending on or after 15 December 2012
No. 2013-03	Topic 825 - Financial Instruments: Clarifying the Scope and Applicability of a Particular Disclosure to Nonpublic Entities	Effective upon issuance (February 7, 2013).
No. 2013-04	Topic 405 - Liabilities: Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date	For annual and interim reports beginning after 15 December, 2013
No 2013-05	Topic 830 - Foreign Currency Matters: Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity	For annual and interim reports beginning after 15 December, 2013
No. 2013-06	Topic 958 - Not-for-Profit Entities: Services Received from Personnel of an Affiliate	For annual and interim reports beginning after 15 July, 2014
No. 2013-07	Topic 205 - Presentation of Financial Statements: Liquidation Basis of Accounting	For annual and interim reports beginning after 15 December, 2013
No. 2013-08	Topic 946 - Financial Services-Investment Companies: Amendments to the Scope, Measurement, and Disclosure Requirements	For annual and interim reports beginning after 15 December, 2013
No. 2013-09	Topic 820 - Fair Value Measurement: Deferral of the Effective Date of Certain Disclosures for Nonpublic Employee Benefit Plans in Update No. 2011-04	Effective upon issuance (July 8, 2013) for financial statements that have not been issued
No. 2013-10	Topic 815 - Derivatives and Hedging: Inclusion of the Fed Funds Effective Swap Rate (or Overnight Index Swap Rate) as a Benchmark Interest Rate for Hedge Accounting Purposes	For annual and interim reports beginning after 17 July, 2013

No. 2013-11	Topic 740 - Income Taxes: Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carry forward, a Similar Tax Loss, or a Tax Credit Carry forward Exists	For annual and interim reports beginning after 15 December, 2013
Updates Issued in 2014		
No. 2014-01	Topic 323 - Investments—Equity Method and Joint Ventures: Accounting for Investments in Qualified Affordable Housing Projects	For annual and interim reports beginning after 15 December, 2014
No. 2014-02	Topic 350 - Intangibles—Goodwill and Other: Accounting for Goodwill	Applied prospectively to goodwill existing as of the beginning of the period of adoption and new goodwill recognized in annual and interim periods beginning after 15 December 15, 2014
No. 2014-03	Topic 815 - Derivatives and Hedging: Accounting for Certain Receive-Variable, Pay-Fixed Interest Rate Swaps—Simplified Hedge Accounting Approach	For annual periods beginning after 15 December, 2014
No. 2014-04	Subtopic 310-40 - Receivables—Troubled Debt Restructurings by Creditors: Reclassification of Residential Real Estate Collateralized Consumer Mortgage Loans upon Foreclosure	For annual periods beginning after 15 December, 2014
No. 2014-05	Topic 853 - Service Concession Arrangements	For annual periods beginning after 15 December, 2014
No. 2014-07	Topic 810 - Consolidation: Applying Variable Interest Entities Guidance to Common Control Leasing Arrangements	For annual periods beginning after 15 December, 2014
No. 2014-08	Topic 205 - Presentation of Financial Statements and Topic 360 - Property, Plant, and Equipment: Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity	Effective in the first quarter of 2015 for public companies with calendar year ends.
No. 2014-09	Topic 606 - Revenue from Contracts with Customers	For annual reporting periods beginning after 15 December, 2016
No. 2014-10	Topic 915 - Development Stage Entities: Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation	For annual periods beginning after 15 December, 2015.
No. 2014-11	Topic 860 - Transfers and Servicing: Repurchase-to-Maturity Transactions, Repurchase Financings and Disclosures	For interim or annual reports beginning after 15 December, 2014
No. 2014-12	Topic 718 - Compensation—Stock Compensation: Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period	For annual and interim periods beginning after 15 December, 2015
No. 2014-13	Topic 810 - Consolidation: Measuring the Financial Assets and the Financial Liabilities of a Consolidated Collateralized Financing Entity	For annual and interim periods beginning after 15 December, 2015
No. 2014-14	Subtopic 310-40 – Receivables-Troubled Debt Restructurings by Creditors: Classification of Certain Government-Guaranteed Mortgage Loans upon Foreclosure	For annual and interim periods beginning after 15 December, 2015
No. 2014-15	Subtopic 205-40 - Presentation of Financial Statements: Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern	For annual and interim periods beginning after 15 December, 2016
No. 2014-16	Topic 815 - Derivatives and Hedging: Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity	For annual and interim periods beginning after 15 December, 2015
No. 2014-17	Topic 805 - Business Combinations: Pushdown Accounting	From 18 November 2014
No. 2014-18	Topic 805 - Business Combinations: Accounting for Identifiable Intangible Assets in a Business Combination	For annual and interim periods beginning after 15 December, 2015

Updates Issued in 2015		
No. 2015-01	Subtopic 225-20 - Income Statement-Extraordinary and Unusual Items: Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items	For annual and interim periods beginning after 15 December, 2015
No. 2015-02	Topic 810 - Consolidation: Amendments to the Consolidation Analysis	For annual and interim periods beginning after 15 December, 2015
No. 2015-03	Subtopic 835-30 – Interest-Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs	For annual and interim periods beginning after 15 December, 2015
2015-04	Topic 715 – Compensation-Retirement Benefits: Practical Expedient for the Measurement Date of an Employer's Defined Benefit Obligation and Plan Assets	For annual and interim periods beginning after 15 December, 2015
2015-05	Subtopic 350-40 – Intangibles, Goodwill and Other Internal-Use Software: Customer's Accounting for Fees Paid in a Cloud Computing Arrangement	For annual and interim periods beginning after 15 December, 2015
2015-06	Topic 260 - Earnings Per Share: Effects on Historical Earnings per Unit of Master Limited Partnership Dropdown Transactions	For annual and interim periods beginning after 15 December, 2015
2015-07	Topic 820 - Fair Value Measurement: Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)	For annual and interim periods beginning after 15 December, 2015
2015-08	Topic 805 - Business Combinations: Pushdown Accounting	From August 2015
2015-09	Topic 944 - Financial Services-Insurance: Disclosures about Short-Duration Contracts	For annual periods beginning after 15 December, 2015 and interim periods beginning after 15 December, 2016.
2015-11	Topic 330 - Inventory: Simplifying the Measurement of Inventory	For annual and interim periods beginning after 15 December, 2016
2015-12	Topic 960 - Plan Accounting: Defined Benefit Pension Plans, Topic 962 - Defined Contribution Pension Plans, Topic 965 - Health and Welfare Benefit Plans: (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient	For annual and interim periods beginning after 15 December, 2015
2015-13	Topic 815 - Derivatives and Hedging: Application of the Normal Purchases and Normal Sales Scope Exception to Certain Electricity Contracts within Nodal Energy Markets	Effective upon issuance and should be applied prospectively.
2015-14	Topic 606 - Revenue from Contracts with Customers: Deferral of the Effective Date	For annual and interim periods beginning after 15 December, 2017
2015-15	Subtopic 835-30 - Interest—Imputation of Interest: Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements	From August 2015
2015-16	Topic 805 - Business Combinations: Simplifying the Accounting for Measurement-Period Adjustments	For annual and interim periods beginning after 15 December, 2015
2015-17	Topic 740 - Income Taxes: Balance Sheet Classification of Deferred Taxes	For annual and interim periods beginning after 15 December, 2016

Source: http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498
Please acknowledge that the FASB material was used with permission by Financial Accounting Foundation

Table 10 - Countries' Financial Profiles

Financial Profile of Australia												
Production and income	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
GDP per capita	USD current PPPs	32416	33963	35679	39343	39704	41138	42253	43802	43676	44706	44971e
Gross national income (GNI) per capita	USD current PPPs	31212	32640	34113	37736	38317	39539	40554	42467	42575	43672	44098e
Household disposable income	Annual growth %	5,6	4,5	4,6	7,1	6,8	1,3	4,9	3,7	0,9	1,5	..
Economic growth	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Real GDP growth	Annual growth %	2,8	3,0	3,3	3,7	1,7	2,0	2,3	3,7	2,5	2,5	2,7 e
Net saving rate in household disposable income	%	-2,1	-0,2	0,8	4,0	10,0	9,1	10,2	11,2	10,3	9,7	..
Gross fixed capital formation	% of GDP	25,8	27,0	27,2	9,5	2,1	2,1	3,8	11,5	2,0	-1,5	-2,0 e
Government deficits and debt	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Government deficit	% of GDP	1,2	1,7	1,9	0,5	-4,0	-5,7	-4,6	-4,4	-2,3	-2,6	..
General government debt	% of GDP	17,2	16,9	16,2	34,1	35,1	43,3	46,9	50,8	62,8	58,5	63,2
General government revenues	% of GDP	36,3	36,5	36,4	35,1	33,0	32,6	32,2	32,6	34,0	34,0	..
General government expenditures	% of GDP	35,1	34,8	34,5	34,6	37,0	38,2	36,8	37,0	36,3	36,6	..
Financial Profile of United Kingdom												
Production and income	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
GDP per capita	USD current PPPs	31791	32724	34971	37509	37765	36383	35859	36575	37605	38743	39 709
Gross national income (GNI) per capita	USD current PPPs	32246	33272	35160	37924	37898	36515	36325	37038	37630	38367	38 986
Household disposable income	Annual growth %	0,4	2,2	1,1	2,6	0,9	3,3	0,7	-2,1	2,6	-1,1	-0,7
Economic growth	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Real GDP growth	Annual growth	3,0	2,2	2,8	2,6	-0,5	-4,2	1,5	2,0	1,2	2,2	2,9

	%											
Net saving rate in household disposable income	%	-1,6	-1,2	-2,2	-0,7	-0,8	4,0	6,1	3,4	2,9	-0,0	-1,9
Gross fixed capital formation	% of GDP	5,1	2,4	6,4	5,7	-5,9	-14,4	5,0	2,0	1,5	2,6	7,5
Government deficits and debt	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Government deficit	% of GDP	-3,6	-3,3	-2,7	-3,0	-5,1	-10,8	-9,7	-7,7	-8,3	-5,7	-5,7
General government debt	% of GDP	43,8	46,4	46,1	55,6	68,3	81,7	92,8	106,7	111,0	106,3	116,8
General government revenues	% of GDP	39,6	40,8	41,5	39,8	41,5	38,8	39,1	39,2	38,4	39,2	38,2
General government expenditures	% of GDP	43,1	44,0	44,3	42,8	46,6	49,6	48,8	46,9	46,8	44,9	43,9
Financial Profile of Greece												
Production and income	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
GDP per capita	USD current PPPs	24155	24641	26356	27793	28896	30662	28961	26626	25177	25523	25 950
Gross national income (GNI) per capita	USD current PPPs	23977	24224	25787	26981	27947	29932	28390	25998	25734	25805	..
Household disposable income	Annual growth %	4,4	3,4	5,1	..	..	0,0	-11,0	-9,8	-7,6	-8,4	..
Economic growth	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Real GDP growth	Annual growth %	4,6	2,2	4,5	4,5	2,0	-4,3	-5,5	-9,1	-7,3	-3,2	0,7
Net saving rate in household disposable income	%	-7,2	-8,0	-7,3	..	..	-4,5	-9,0	-8,2	-8,3	-16,4	..
Gross fixed capital formation	% of GDP	22,2	20,6	21,5	21,4	19,4	-13,9	-19,3	-20,5	-23,5	-9,4	-2,8
Government deficits and debt	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Government deficit	% of GDP	-7,4	-5,3	-3,2	-4,0	-7,8	-15,2	-11,2	-10,2	-8,8	-12,4	-3,6
General government debt	% of GDP	114,2	114,5	107,9	103,9	102,6	134,7	128,4	110,7	167,0	181,7	179,8
General government	% of GDP	38,0	38,5	39,7	40,4	40,6	38,9	41,3	44,0	46,3	48,3	46,4

revenues												
General government expenditures	% of GDP	45,4	43,8	42,9	44,4	48,3	54,1	52,5	54,2	55,2	60,8	49,9
Financial Profile of Germany												
Production and income	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
GDP per capita	USD current PPPs	29901	31366	33713	36783	38434	37137	39622	42152	42807	43282	44 985
Gross national income (GNI) per capita	USD current PPPs	30187	31738	34413	37324	38805	37971	40402	43216	43826	44222	46 016
Household disposable income	Annual growth %	0,2	0,6	1,1	0,0	0,6	-0,6	0,4	0,9	0,5	0,5	1,3
Economic growth	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Real GDP growth	Annual growth %	1,2	0,8	3,4	3,3	1,1	-5,6	4,1	3,7	0,4	0,3	1,6
Net saving rate in household disposable income	%	10,4	10,5	10,6	10,2	10,5	10,0	10,0	9,6	9,3	9,1	9,5
Gross fixed capital formation	% of GDP	-0,3	0,9	8,0	4,1	1,5	-10,1	5,4	7,2	-0,4	-1,3	3,5
Government deficits and debt	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Government deficit	% of GDP	-3,8	-3,3	-1,6	0,2	-0,2	-3,2	-4,2	-1,0	-0,1	-0,1	0,3
General government debt	% of GDP	68,8	71,2	69,3	64,3	68,1	75,6	84,1	83,5	86,4	81,6	82,2
General government revenues	% of GDP	43,5	43,6	43,7	43,0	43,4	44,3	43,0	43,8	44,4	44,4	44,6
General government expenditures	% of GDP	47,2	46,9	45,3	42,8	43,6	47,6	47,3	44,7	44,4	44,5	44,3
Financial Profile of United States												
Production and income	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
GDP per capita	USD current PPPs	40246	42466	44595	47987	48330	46930	48302	49710	51368	52592	54 353
Gross national income (GNI) per capita	USD current PPPs	40583	43063	45575	48346	48568	47176	48808	50622	52770	53943	55 842
Household disposable income	Annual growth %	3,0	1,4	3,9	1,9	1,8	-0,3	1,3	2,7	3,3	-1,5	2,7

Economic growth	Unit	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP growth	Annual growth %	3,6	3,1	2,7	1,8	-0,3	-2,8	2,5	1,6	2,2	1,5	2,4
Net saving rate in household disposable income	%	3,4	1,5	2,5	3,1	5,1	6,3	5,8	6,2	7,9	4,9	5,0
Gross fixed capital formation	% of GDP	6,2	5,3	2,3	-1,2	-4,8	-13,1	1,1	3,7	6,3	2,4	4,1
Government deficits and debt	**Unit**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Government deficit	% of GDP	-4,4	-3,3	-2,2	-3,5	-7,0	-12,7	-12,0	-10,6	-8,8	-5,3	-4,9
General government debt	% of GDP	61,2	61,4	60,8	76,5	92,3	105,7	116,0	121,6	124,7	123,8	123,2
General government revenues	% of GDP	31,6	33,0	33,8	33,4	32,4	30,3	30,9	31,2	31,2	33,4	33,1
General government expenditures	% of GDP	36,0	36,2	36,0	36,9	39,4	43,0	42,9	41,8	40,0	38,7	38,0

Source from "Factbook statistics", Country statistical profiles, Key tables from OECD

Appendix III: < Research Results >

Table 1 - Applied Ratios

The research capture the aspects of firms using the following ratios			
1. Market Value-SIZE		**2. Investement**	
SALESHA	Sales per share	DIVSH	Dividend per share
NAVSH	Net Asset Value per share	DIVYI	Dividend yield (div per share/share price)
SALETAS	Turnover/Total Assets	DIVCOV	Dividend Cover (Net profit/dividend)
RESTAS	Reserves/Total Assets	PE	P/E
RESSFU	Res/Shareholders Funds	HOLTA	Holdings/Total Assets
LNMV	Natural Argorithm of MV		
3. Growth		**4. Profitability**	
MVBV	Market to Book Value	PLOWB	Plowback Ratio (Retained Profit/Operating Profit)
EPSG	Earnings per Share Growth	OPM	Operating Profit Margin (oper profit/sales)
PEG	PE Ratio/Annual EPS growth	NPM	Net Profit Margin (net profit/sales)
DIVSHG	Dividend per Share Growth	ROSC	(Profit after tax/Equity+Reserves)
		EPS	EPS
		ROCE	(PBIT/Equity+Reserves+Lt loans)
5. Liquidity		**6.Leverage**	
CUR	Current Ratio	DEBT	debtor turnover (sales/debtors)
CASH	Cash Ratio	ETL	Equity/Total Liabilities
QUI	Quick Ratio	TLSFU	Total Liabilities/Shareholders Funds
CFSH	Operating Cash Flow per share [(Oper profit+depreciation)/No of shares]	CGEAR	TL/Capital Employed-Intangibles+Short-term Liabilities
CFM	Cash Flow Margin (earnings + dep/sales)	CLSFU	Current Liabilities/Shareholders Funds
WCR	Working Capital Ratio (Sales/Working Capital)	INTCOV	Operating Profit/Interest Charge
STOCKT	Stock turnover (cost of sales/stock)	IGEAR	Interest Charge/Operating Profit
		DEBTE	Debt/Equity
		DSFU	Debt/Shareholders Funds

Table 2 - Descriptive Statistics

Panel A:IFRS vs Old GAAP							**Pair-wise *t*-tests for equality of means**		
1.Australa	**2004**		**2005**		**2006**		**2004 vs 2005**	**2004 vs 2006**	**2005 vs 2006**
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**			
Test Variables									
Accruals	-0,0906	2,2111	0,0770	1,5966	0,1898	2,2569			
FFS	0,1689	0,3750	0,1645	0,3711	0,1447	0,3522			
Big 4	0,5219	0,5001	0,5307	0,4996	0,5351	0,4993			
Insider Trading Value (ITV)	**1,7893**	11,6519	**2,5555**	12,7078	**4,0355**	26,8641	*	*	*
COC	1,0834	3,9036	0,9810	3,2706	0,9246	3,6472			
Control variables									
Size									
SALESHA	1,4981	2,1880	1,4928	2,2933	1,3652	2,0536			
NAVSH	1,4952	3,1354	**1,7611**	4,4103	**1,3937**	2,5089			*
SALETAS	**1,0698**	1,7468	**0,9206**	1,3916	**0,7958**	0,8425	*	***	*
RESTAS	**0,0518**	0,4128	0,0861	0,5612	**0,1213**	0,7729		*	
RESSFU	**0,0837**	0,4360	**0,0185**	0,6599	**0,0688**	0,5735	**		*
LNMV	**3,2182**	3,0454	**3,3588**	3,0391	**3,7479**	3,0207		***	*
Investment									
DIVSH	0,0770	0,3000	0,0635	0,3115	0,0632	0,2402			
DIVYI	**0,0243**	0,1353	**0,0535**	0,4349	0,0322	0,2836	*		
DIVCOV	**1,0533**	7,7775	0,7931	4,2952	**1,1972**	2,7760			*
PE	4,4037	21,4701	4,2731	20,62983	4,9607	21,6254			
HOLTA	**0,0289**	0,1210	**0,0394**	0,1132	**0,0385**	0,1013	*	*	
Growth									
MVBV	3,1676	13,8328	**3,6739**	9,7222	**2,8267**	6,5761			*
Profitability									
PLOWB	3,0469	13,9822	**2,6041**	13,4560	**3,7078**	12,7515			*
OPM	**-0,4100**	2,0474	**-0,7943**	2,9266	**-0,6778**	1,7437	**	**	
NPM	-1,2767	3,3331	**-1,1059**	2,7556	**-1,3988**	3,2771			*
ROSC	**-0,1795**	1,5714	**-0,0279**	1,5006	-0,0832	1,5358	*		
EPS	0,0280	0,8998	-0,0079	1,4313	0,0087	0,8508			
ROCE	-0,0726	1,0343	-0,0865	1,0151	-0,0333	1,0013			
Liquidity									
CUR	3,6724	5,1550	3,6221	4,7293	3,9968	6,2189			
CASH	**1,9784**	5,2730	**1,3600**	3,4553	**1,4362**	3,9644	**	*	
QUI	**2,6516**	3,6306	**3,2067**	5,1986	**3,5588**	6,3378	*	***	
CFSH	0,1747	0,7993	0,1821	2,0221	0,1820	0,9873			
CFM	-1,5360	7,1409	-1,3395	8,3051	-1,6685	9,8605			
WCR	**4,0357**	15,9593	**3,0024**	11,5861	**2,2015**	14,0555		*	*
STOCKT	**6,2317**	11,4941	**7,8350**	14,4088	**8,1828**	16,1229	*	**	
Leverage									
DEBT	**10,8076**	14,7790	**8,8864**	10,5082	**8,9864**	13,2470	**	**	
ETL	6,4336	12,7492	5,9760	11,6494	7,0681	17,4741			
TLSFU	0,8442	1,7473	0,8608	2,3639	0,6900	1,9576			
CGEAR	0,5179	1,3154	0,5173	2,0807	0,6430	2,6665			

CLSFU	**0,7078**	4,9077	**0,5390**	1,3408	**0,3968**	1,3955		*	*
INTCOV	1,0958	20,6600	0,9108	12,0199	2,0298	19,3118			
IGEAR	0,0531	0,3903	0,0595	0,3511	0,0530	0,7410			
DEBTE	**0,2657**	1,3784	0,2872	0,9961	**0,3525**	1,0674		*	
DSFU	0,2858	1,3688	0,2806	1,0738	0,3086	1,0313			

2.Germany	**2004**		**2005**		**2006**		**Pair-wise *t*-tests for equality of means**		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2004 vs 2005**	**2004 vs 2006**	**2005 vs 2006**
Test Variables									
Accruals	-0,0429	0,2920	0,0053	0,3082	0,0184	0,3383			
FFS	**0,0594**	0,2367	**0,0223**	0,1478	**0,0173**	0,1306	***	***	
Big 4	0,5470	0,4984	0,5569	0,4974	0,5569	0,4974			
Insider Trading Value (ITV)	**1,1573**	6,6654	**2,9769**	13,2930	**3,5736**	16,7914	**	***	
COC	**0,3526**	0,7099	0,3009	0,4235	**0,2762**	0,3222		**	
Control variables									
Size									
SALESHA	**5,1935**	3,8847	**4,6151**	3,4375	**3,8905**	2,7648	**	***	***
NAVSH	10,1539	13,8326	9,9852	15,5563	9,2153	12,0599			
SALETAS	**1,1909**	0,6925	**1,0913**	0,6274	1,1289	0,6426	**		
RESTAS	**0,3713**	0,3104	**0,2669**	0,4656	**0,2511**	0,4401	***	***	
RESSFU	0,3286	0,2621	0,3138	0,2792	0,3120	0,4465			
LNMV	**4,3441**	2,2974	**4,6534**	2,2473	**4,7716**	2,3533	*	***	
Investment									
DIVSH	1,0744	12,4940	1,5134	17,1322	0,6715	3,4273			
DIVYI	**0,0324**	0,2936	**0,0166**	0,0740	0,0130	0,0371	*		
DIVCOV	1,2111	4,6444	**1,1650**	4,0218	**1,7317**	6,6815			*
PE	**9,6265**	24,4322	**13,6744**	22,3777	**13,2751**	20,0454	**	**	
HOLTA	0,0575	0,2434	0,0447	0,1325	0,0521	0,1511			
Growth									
MVBV	2,6567	16,2334	2,2561	9,4690	2,1885	16,4268			
Profitability									
PLOWB	1,0062	6,7901	0,5735	4,6634	0,8261	3,4996			
OPM	**0,0209**	0,4137	0,0540	1,7974	**0,0538**	0,3636		*	
NPM	-0,0137	1,2876	0,0597	1,7909	0,0545	4,3353			
ROSC	**0,0212**	0,5963	**0,0876**	0,7240	0,1016	1,4894	*		
EPS	**0,7262**	8,2000	**1,7206**	8,7721	**1,6248**	5,5413	*	*	
ROCE	0,0682	0,2644	0,0668	0,6327	0,0823	1,0789			
Liquidity									
CUR	**2,3739**	3,8277	2,1762	2,9171	**2,0519**	3,3706		*	
CASH	**4,8018**	52,1461	**1,1168**	4,0035	1,1986	8,1140	*		
QUI	**2,3580**	8,0834	**1,6036**	2,2552	**1,6254**	2,2342	*	*	
CFSH	2,9196	12,4347	3,1290	9,1808	3,2641	9,2151			
CFM	0,0230	0,3566	0,0825	1,1762	0,1093	3,4495			
WCR	4,4883	22,3785	4,2666	35,4448	3,1197	24,6049			
STOCKT	3,1959	2,4432	3,2559	2,4351	3,0594	2,3690			
Leverage									

DEBT	**4,3000**	2,6894	**4,5162**	2,5553	**4,7006**	2,3900	*	**	
ETL	**1,1380**	1,7128	**1,2964**	1,8163	**1,3166**	1,8184	*	*	
TLSFU	1,5262	4,1129	1,3149	2,8102	1,4999	4,4906			
CGEAR	0,8723	2,1179	0,8534	4,6739	0,7546	1,3957			
CLSFU	0,7317	1,7005	0,9005	5,5067	0,7914	2,6375			
INTCOV	**3,9855**	15,9924	**7,6858**	45,1589	4,9733	16,7322	*		
IGEAR	0,1326	1,0552	0,2447	2,6023	0,1120	1,1162			
DEBTE	**0,9320**	2,5839	0,7991	2,1255	**0,7458**	1,8639		*	
DSFU	0,6801	2,3694	0,6085	1,9593	0,6416	2,4416			

3.Greece	**2004**		**2005**		**2006**		**Pair-wise *t*-tests for equality of means**		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2004 vs 2005**	**2004 vs 2006**	**2005 vs 2006**
Test Variables									
Accruals	0,0056	0,0586	0,0372	0,8296	0,0031	0,7608			
FFS	**0,2585**	0,4389	**0,1805**	0,3855	**0,1756**	0,3814	*	**	
Big 4	0,2146	0,4116	0,2293	0,4214	0,2146	0,4116			
Insider Trading Value (ITV)	**0,8996**	4,5619	**3,5291**	19,2287	**7,3408**	33,8000	*	***	*
COC	0,0933	0,2160	0,1259	0,4935	0,1074	0,2562			
Control variables									
Size									
SALESHA	4,8732	13,4929	4,9739	13,1713	4,8516	12,7620			
NAVSH	3,3048	8,3533	**3,3184**	5,5931	**2,6335**	5,7629			*
SALETAS	0,7167	0,7393	0,8149	1,3676	0,8069	1,3219			
RESTAS	**0,1295**	0,1486	**0,3022**	0,2472	**0,2774**	0,2669	***	***	*
RESSFU	**0,1633**	0,3973	**0,3504**	0,1838	**0,3296**	0,1950	***	***	*
LNMV	**4,0834**	1,1808	**3,8145**	1,6018	**4,1548**	1,5820	*		**
Investment									
DIVSH	**0,0782**	0,2265	0,1147	0,2904	**0,1171**	0,3350		*	
DIVYI	**0,0166**	0,0197	**0,0320**	0,0644	**0,0220**	0,0738	***		*
DIVCOV	**2,9541**	4,9360	**1,2277**	9,1653	**0,7750**	11,0371	**	**	
PE	12,1049	25,3921	15,1925	28,6980	14,7543	29,5498			
HOLTA	**0,1794**	0,2251	**0,0909**	0,3272	0,1046	0,4548	***		
Growth									
MVBV	**1,8881**	1,8909	**6,1334**	11,2420	**8,0356**	13,7108	***		*
Profitability									
PLOWB	0,1561	5,3153	0,6781	9,7952	2,6754	25,8401			
OPM	0,0124	0,8451	**1,3762**	14,5055	**0,2498**	4,7509			*
NPM	-0,0165	1,0716	0,0673	0,8550	0,2473	3,1252			
ROSC	**0,1151**	0,7960	**0,0236**	0,1974	**-0,9995**	14,6643	*		*
EPS	0,3020	1,3395	0,2051	0,8908	0,1895	0,7616			
ROCE	**0,1263**	0,4456	**0,0547**	0,1687	**0,0685**	0,1305	**	*	
Liquidity									
CUR	**2,5085**	5,3267	**6,8317**	11,7128	**1,8849**	2,4848	***	*	***
CASH	**0,6026**	4,9610	0,3689	2,9970	**0,0931**	0,2313		*	
QUI	**1,8680**	4,7763	**6,3509**	11,6404	**1,3867**	1,9338	***	*	***
CFSH	0,5881	1,5807	0,6311	1,7858	0,6221	1,6340			

CFM	**-0,1053**	3,3770	**0,3067**	1,6832	0,2448	1,3055	*		
WCR	2,5353	8,3135	0,9329	14,3258	1,3559	11,4887			
STOCKT	7,4685	12,4272	6,8800	11,6817	8,3223	12,7237			
Leverage									
DEBT	3,0945	3,9656	3,1091	3,9783	2,6477	3,7611			
ETL	**4,5689**	17,9645	**2,8758**	9,1012	**1,6826**	6,8325		**	*
TLSFU	**0,6256**	2,6378	**0,8356**	1,1763	**1,2759**	1,5098		***	***
CGEAR	**0,4663**	0,3376	**0,4846**	0,3817	**0,6152**	0,5549		***	***
CLSFU	**0,4176**	2,5438	**0,5863**	0,9452	**0,8687**	1,2403		**	**
INTCOV	**7,2911**	18,8463	**3,6028**	10,3199	**2,7258**	8,6334	**	***	
IGEAR	**1,1259**	5,3321	0,7079	6,4158	**0,3221**	3,2480		*	
DEBTE	**0,2568**	0,4490	**0,3711**	1,0691	2,0293	21,5315	*		
DSFU	0,2080	0,3682	0,2493	0,3808	1,8975	21,5288			

4.UK	**2004**		**2005**		**2006**		**Pair-wise *t*-tests for equality of means**		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2004 vs 2005**	**2004 vs 2006**	**2005 vs 2006**
Test Variables									
Accruals	0,0311	0,7466	0,0086	2,3575	0,0024	0,1600			
FFS	0,0471	0,2123	0,0505	0,2194	0,0640	0,2451			
Big 4	0,8687	0,3383	0,8586	0,3490	0,8653	0,3420			
Insider Trading Value (ITV)	**1,3135**	4,3457	**1,1472**	2,4824	**2,6733**	6,4041		***	***
COC	0,2278	0,2896	0,2289	0,3028	0,2309	0,2848			
Control variables									
Size									
SALESHA	**1,9733**	1,4965	**2,8917**	2,3239	**2,9164**	2,3473	***	***	
NAVSH	1,2388	1,1499	1,3160	1,3422	1,3466	1,3413			
SALETAS	1,0327	0,6542	**1,0941**	0,7261	**1,0398**	0,6606			*
RESTAS	**0,2116**	0,2669	**0,1580**	0,3003	**0,1589**	0,3369	**	**	
RESSFU	**0,3141**	0,2522	**0,2075**	0,7363	**0,2060**	0,5424	**	***	
LNMV	**5,7945**	2,1177	5,9253	2,1891	**6,0976**	2,0789		*	
Investment									
DIVSH	0,2761	0,2723	0,2866	0,2777	0,2961	0,2691			
DIVYI	**0,2271**	0,2050	**0,3071**	0,2697	**0,2938**	0,2564	***	***	
DIVCOV	1,6002	2,1958	1,3855	2,2811	1,4120	2,3310			
PE	**2,0453**	4,7893	**12,9472**	14,6634	**12,9394**	13,8582	***	***	
HOLTA	**0,2216**	0,2716	**0,1662**	0,2563	**0,0245**	0,0779	**	***	***
Growth									
MVBV	**0,3491**	1,3963	**1,7296**	3,8446	**1,8504**	3,7847	***	***	
Profitability									
PLOWB	1,8012	5,7793	1,3186	10,1666	1,2752	3,1193			
OPM	**0,1063**	0,3611	**0,1563**	0,3924	**0,1737**	0,3214	*	**	
NPM	0,0657	0,1947	0,0862	0,2797	0,0904	0,2888			
ROSC	**0,1481**	0,2295	**0,2449**	0,6635	**0,2740**	0,6759	**	***	
EPS	**0,2184**	0,3538	**0,3007**	0,8473	**0,3708**	1,1832	*	**	*
ROCE	**0,1072**	0,1346	**0,1240**	0,1325	**0,1309**	0,1935	*	*	
Liquidity									

CUR	**1,3930**	0,4754	**1,1784**	0,5157	**1,5212**	0,4968	***	***	***
CASH	0,4248	0,3463	0,4356	0,3810	0,3977	0,3353			
QUI	**1,1035**	0,3208	**1,1462**	0,3694	1,1501	0,4694	*		
CFSH	**0,3679**	0,4652	**0,6868**	0,9549	**0,7774**	1,1444	***	***	
CFM	**0,1001**	0,2300	**0,1561**	0,2844	**0,1573**	0,2978	***	***	
WCR	**0,4146**	4,4972	**4,6145**	13,7949	**6,3122**	12,6316	***	***	*
STOCKT	2,8815	2,7506	2,8320	2,7462	2,8339	2,6905			
Leverage									
DEBT	3,5798	1,6586	3,6734	1,7023	3,6243	1,7533			
ETL	**0,8979**	0,7559	**0,9357**	1,0334	**1,1587**	1,6848		**	*
TLSFU	1,1192	1,3001	1,3161	4,4436	1,2891	2,4869			
CGEAR	**0,7741**	1,6042	**1,0748**	3,2764	**1,0355**	2,0116	*	*	
CLSFU	0,6794	1,5879	0,7033	4,2240	0,6713	1,3941			
INTCOV	**2,8593**	3,2790	**3,3227**	4,9571	**3,3083**	4,5732	*	*	
IGEAR	**0,1312**	0,2830	**0,2073**	0,5154	**0,1688**	0,3860	**	*	
DEBTE	**0,5729**	0,6653	**0,8249**	1,5687	0,7058	1,6465	**		
DSFU	0,5191	1,9342	0,6246	2,1744	0,5344	1,0554			
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% level respectively.									

Panel B:IFRS vs Crisis							**Pair-wise *t*-tests for equality of means**		
1.Australia	**2007**		**2008**		**2009**		**2007 vs 2008**	**2007 vs 2009**	**2008 vs 2009**
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**			
Test Variables									
Accruals	**-0,0217**	1,4976	**-0,3383**	1,7506	**0,6015**	0,5783		*	**
FFS	**0,1798**	0,3845	**0,2522**	0,4347	0,1952	0,3968	***		
Big 4	0,5329	0,4995	0,5285	0,4997	0,5351	0,4993			
Insider Trading Value (ITV)	2,6753	10,2749	3,1140	28,7405	2,4114	12,6097			
COC	1,0697	8,4806	**1,4989**	13,2700	**0,4277**	1,3294			*
Control variables									
Size									
SALESHA	**1,4812**	2,2613	**1,4753**	2,2290	**1,3424**	2,0841		*	*
NAVSH	1,5050	3,0242	1,4477	3,2272	1,7188	6,0998			
SALETAS	**0,7827**	0,7706	**0,8849**	1,0749	**0,8015**	1,0867	*		*
RESTAS	**0,3204**	2,1300	0,4476	2,7488	**0,6234**	3,8599		*	
RESSFU	**0,0768**	0,4808	0,1039	0,8163	**0,1187**	0,3435		*	
LNMV	**3,9924**	2,9765	**3,2803**	2,9180	**3,7862**	2,9504	***	*	***
Investment									
DIVSH	0,0603	0,1329	0,0563	0,1249	0,0606	0,2920			
DIVYI	**0,0142**	0,0313	**0,0348**	0,1158	**0,0309**	0,2030	***	**	
DIVCOV	**1,0735**	2,7269	**0,8794**	3,1596	**0,6206**	5,8144	*	*	*
PE	**7,0045**	24,9862	**3,6764**	14,9594	**4,8436**	28,4246	**	*	
HOLTA	0,0445	0,2039	0,0363	0,1064	0,0365	0,1046			
Growth									

MVBV	**2,8111**	6,7729	**1,6064**	6,2610	**3,7492**	12,9698	***	*	***
Profitability									
PLOWB	4,9041	14,5731	4,9387	16,1344	5,9215	22,9240			
OPM	**-0,5306**	1,6650	**-0,7258**	1,8770	**-0,9531**	3,6191	*	**	*
NPM	**-1,0414**	2,4801	**-1,3380**	3,1667	-1,2253	3,2128	*		
ROSC	**-0,0781**	0,9708	**-0,3172**	1,4843	**-0,1854**	1,3061	***	*	*
EPS	**-0,0016**	0,8713	0,0131	0,8127	**0,0601**	0,6288		*	
ROCE	-0,1076	1,5639	-0,2853	3,8990	-0,1368	0,8334			
Liquidity									
CUR	**4,0579**	6,8339	3,9347	7,9909	**3,6301**	5,2447		*	
CASH	**1,0350**	3,2166	0,9065	3,2699	**0,8429**	2,2056		*	
QUI	3,6582	6,6652	3,4815	7,6661	3,5456	6,6232			
CFSH	0,1621	0,9403	**0,1203**	1,1030	**0,2289**	1,2199			*
CFM	**-0,8125**	2,8276	**-1,1623**	3,1993	**-0,9149**	4,3117	*		*
WCR	**4,9853**	14,0087	**1,9704**	13,8906	**3,9043**	13,8157	***	*	**
STOCKT	7,5936	13,2374	7,7222	14,7155	7,3381	14,1887			
Leverage									
DEBT	**8,6022**	10,8707	**9,6493**	12,3658	9,4058	12,5149	*		
ETL	**5,6207**	10,5587	**5,6250**	12,1035	**6,5515**	14,3817		*	*
TLSFU	**0,7778**	2,3849	**0,9506**	3,0601	0,7723	2,4155	*		
CGEAR	0,7518	3,5987	0,8249	8,8329	0,7082	2,1742			
CLSFU	0,4797	1,6670	0,5750	3,6071	0,5005	1,5643			
INTCOV	**1,3739**	17,4252	**0,1887**	14,7271	**0,1001**	18,3680	*	*	
IGEAR	**0,1987**	1,9732	**-0,0344**	0,9764	**0,3182**	3,3021	**		**
DEBTE	**0,3309**	0,8076	**0,3916**	1,0132	**0,2280**	0,9472		*	**
DSFU	**0,2944**	1,0094	0,3418	1,2411	**0,2560**	0,9042			*

							Pair-wise *t*-tests for equality of means		
2.Germany	**2007**		**2008**		**2009**		**2007 vs 2008**	**2007 vs 2009**	**2008 vs 2009**
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**			
Test Variables									
Accruals	0,0019	0,8005	0,0741	0,6160	0,0503	0,4867			
FFS	0,0817	0,2742	0,0965	0,2957	0,0990	0,2990			
Big 4	0,5545	0,4976	0,5644	0,4965	0,5817	0,4939			
Insider Trading Value (ITV)	8,3099	74,4376	7,9268	74,2057	6,2980	100,6435			
COC	**0,3139**	0,3951	**0,4655**	0,6061	**0,2772**	0,4918	***		***
Control variables									
Size									
SALESHA	**3,6203**	2,4982	3,9456	2,7626	**3,9057**	2,7720		*	
NAVSH	**9,3706**	11,7850	**9,1309**	11,3985	**8,1815**	10,5589		*	*
SALETAS	**1,1206**	0,6040	**1,1620**	0,6639	**1,0536**	0,6147	*	*	**

RESTAS	0,2772	0,7274	0,3038	1,0509	0,2662	0,8603			
RESSFU	0,3266	0,8312	0,3148	0,3712	0,3191	0,3901			
LNMV	**4,8958**	2,3891	**4,3621**	2,3949	**4,5654**	2,4093	***	*	
Investment									
DIVSH	0,6084	2,1850	0,7491	2,5639	0,9377	5,6672			
DIVYI	**0,0177**	0,0612	**0,0342**	0,1024	0,0271	0,1231	***		
DIVCOV	**1,1648**	2,8238	**0,8656**	3,0045	0,8896	6,3313	*		
PE	**11,3875**	20,6887	**7,6974**	20,1307	**8,2726**	24,1211	**	**	
HOLTA	**0,0513**	0,1423	**0,0484**	0,1370	**0,0634**	0,2118			*
Growth									
MVBV	**2,3591**	11,1471	**1,1955**	10,1666	1,7576	9,3409	*		
Profitability									
PLOWB	0,8857	12,6483	1,6108	11,3878	0,6815	15,2545			
OPM	**0,0417**	0,4461	**-0,0132**	0,5811	-0,0039	1,0167	*		
NPM	**0,0229**	0,4255	**-0,0297**	0,5746	0,0009	0,9010	*		
ROSC	**0,1264**	1,0063	**0,0438**	0,4705	**0,0138**	0,8498	*	*	
EPS	1,4928	6,3676	1,1320	6,5662	0,9985	6,9618			
ROCE	**0,0850**	0,1753	**0,0714**	0,1805	**0,0352**	0,2985		***	**
Liquidity									
CUR	2,0557	2,6818	1,9609	2,3059	2,5960	8,4439			
CASH	**0,5712**	1,0395	0,5815	1,0221	**0,9406**	3,6436		**	
QUI	1,4177	2,4245	1,4610	3,9511	1,4988	1,9079			
CFSH	**2,1556**	3,8807	**2,2058**	4,8408	**1,3499**	2,5510		***	**
CFM	0,0785	0,5432	0,0309	0,5242	0,0682	0,8355			
WCR	5,7431	18,8014	5,1682	22,6433	5,6216	34,5769			
STOCKT	3,0718	2,2290	**3,2191**	2,4173	**2,8879**	2,2949			**
Leverage									
DEBT	4,8081	2,4569	4,9690	2,7402	4,8111	2,8340			
ETL	1,2362	1,6431	1,2111	2,7922	1,2300	1,6255			
TLSFU	1,5811	5,3596	1,5058	4,3876	1,3822	5,5139			
CGEAR	0,7495	2,7015	0,7846	3,1492	0,8030	1,4374			
CLSFU	0,7858	3,5227	0,8492	4,0600	0,7502	3,1606			
INTCOV	**6,5106**	19,6079	**4,1361**	19,0525	**3,1489**	19,6758	*	**	*
IGEAR	0,1360	0,6011	0,1002	1,3169	0,1088	4,2143			
DEBTE	1,1060	4,1608	1,2068	3,8639	1,5156	8,3443			
DSFU	0,6873	4,8295	0,5629	4,4039	0,6123	2,8944			

							Pair-wise *t*-tests for equality of means		
3.Greece	**2007**		**2008**		**2009**		**2007 vs 2008**	**2007 vs 2009**	**2008 vs 2009**
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**			
Test Variables									
Accruals	0,0201	0,7280	0,0056	0,3425	0,0000	0,8917			

FFS	**0,1171**	0,3223	0,1366	0,3442	**0,1756**	0,3814		*	
Big 4	0,2049	0,4046	0,2049	0,4046	0,2098	0,4081			
Insider Trading Value (ITV)	**7,4974**	27,2510	**7,6791**	33,2413	**2,6640**	13,2739		**	**
COC	**0,1027**	0,1906	**0,4950**	1,4927	**0,3653**	1,0259	***	***	
Control variables									
Size									
SALESHA	6,0291	9,4701	5,7142	6,8565	4,7810	13,3387			
NAVSH	**3,4883**	5,5179	3,3523	5,9556	**2,6530**	6,4583		*	
SALETAS	0,8071	0,7819	0,8324	0,8914	2,6800	26,7177			
RESTAS	0,2366	0,1830	0,2253	0,1889	1,6697	19,6846			
RESSFU	**0,4429**	0,1676	**0,4399**	0,1703	**0,3506**	0,2065		***	***
LNMV	**4,2876**	1,5989	**3,3806**	1,6190	**3,4760**	1,7108	***	***	
Investment									
DIVSH	0,1243	0,3516	0,1455	0,3982	0,1123	0,5578			
DIVYI	**0,0242**	0,1203	**0,0603**	0,2122	**0,0355**	0,1301	**		*
DIVCOV	**0,9755**	6,1683	0,2396	10,6356	**-0,8311**	8,0265		**	
PE	**17,4977**	29,9540	**9,6418**	24,8139	**5,8320**	28,8944	***	***	*
HOLTA	0,1411	1,0459	0,0952	0,5360	0,1430	0,6218			
Growth									
MVBV	**2,3826**	9,5384	**0,9521**	2,7503	**1,4022**	6,4495	**		*
Profitabily									
PLOWB	1,0692	13,6773	0,4804	11,0049	0,4222	13,0814			
OPM	-0,2239	9,6973	**-0,0481**	1,0654	**0,1678**	2,3907			*
NPM	-0,0785	2,7157	-0,0827	0,5885	-0,0758	1,1127			
ROSC	**0,0757**	0,1794	0,0332	0,4652	**0,0037**	0,2171		***	
EPS	**0,2110**	0,9046	**0,0454**	0,6167	**0,0405**	0,6292	**	**	
ROCE	**0,0795**	0,1462	**0,0282**	0,1793	**0,0462**	0,2462	*	*	
Liquidity									
CUR	**1,7497**	1,3267	**1,6761**	1,3032	**2,9910**	4,2543		***	***
CASH	0,5674	2,6310	**0,3201**	1,0830	**0,5790**	1,3572			**
QUI	**1,3108**	1,3123	**1,2451**	1,2019	**2,3967**	4,7023		***	***
CFSH	0,5964	2,0977	0,4306	1,5296	0,3635	1,3647			
CFM	**0,1986**	1,5616	**0,0133**	0,2944	**0,3292**	1,8841	*		**
WCR	**2,4370**	13,8111	**4,0441**	14,7373	**-0,1834**	20,3203		*	**
STOCKT	7,2417	8,7443	**8,2060**	9,8764	**6,8154**	10,3790			*
Leverage									
DEBT	3,7773	3,4575	3,7558	3,1117	3,5885	4,5771			
ETL	**0,7657**	1,4914	**0,6887**	1,1459	**1,6853**	2,5863		***	***
TLSFU	**1,7028**	1,5063	**1,9760**	1,9648	**1,0890**	1,8522	*	***	***
CGEAR	**0,7888**	0,4998	**0,8064**	0,4666	**0,5479**	0,7579		***	***
CLSFU	**1,0667**	1,0604	**1,2171**	1,3409	**0,7008**	1,4974		***	***
INTCOV	**2,2289**	7,0110	**0,9233**	4,7741	**0,9078**	7,1681	**	*	

IGEAR	**-0,1395**	3,2933	**0,3252**	2,4668	0,1987	3,3352	*		
DEBTE	**1,2553**	1,6124	**1,5603**	2,3450	**0,5386**	0,8955	*	***	***
DSFU	**0,6076**	0,6432	**0,7589**	0,9501	**0,3882**	0,5230	*	***	***

							Pair-wise *t*-tests for equality of means		
4.UK	**2007**		**2008**		**2009**		**2007 vs 2008**	**2007 vs 2009**	**2008 vs 2009**
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**			
Test Variables									
Accruals	-0,0092	0,1553	0,1702	0,2096	-0,0562	0,1425			
FFS	**0,0673**	0,2510	**0,1044**	0,3063	**0,1953**	0,3971	*	***	***
Big 4	0,8818	0,3234	0,8788	0,3269	0,8822	0,3230			
Insider Trading Value (ITV)	2,2142	8,0645	1,5154	4,4922	2,1794	10,3269			
COC	**0,1951**	0,3287	**0,6309**	2,1901	**0,3857**	1,9616	***	*	*
Control variables									
Size									
SALESHA	**2,9663**	2,3666	**3,2329**	2,4576	3,0199	2,3884	*		
NAVSH	1,7862	2,0619	1,7306	1,8243	1,6883	1,9169			
SALETAS	1,0143	0,6761	1,0588	0,7290	1,0283	0,7112			
RESTAS	**0,2143**	0,6402	**0,1339**	0,2647	**0,1427**	0,3251	**	*	
RESSFU	0,2242	0,5876	0,2965	1,8123	0,2223	1,2777			
LNMV	**5,9440**	2,1509	**5,2514**	2,2909	**5,6840**	2,2688	***	*	**
Investment									
DIVSH	**0,2408**	0,2218	**0,3039**	0,2868	0,2673	0,2974	***		
DIVYI	**0,3400**	0,2910	0,3169	0,2947	**0,2981**	0,2944		**	
DIVCOV	**0,9669**	1,6420	**0,6240**	2,1533	**0,6564**	2,5054	**	**	
PE	**11,9978**	19,0841	**6,1535**	16,3231	**10,0661**	22,9346	***		**
HOLTA	**0,2093**	0,2695	**0,1968**	0,2731	**0,0525**	0,1728		***	***
Growth									
MVBV	**2,4537**	14,7323	**0,7512**	14,3459	1,0175	14,2823	*		
Profitability									
PLOWB	1,2538	3,9567	1,0835	6,9015	0,8924	12,0564			
OPM	**0,1480**	0,9416	**0,0711**	0,3896	0,0935	0,2821	*		
NPM	0,0469	0,4709	0,0184	0,2243	0,0270	0,2348			
ROSC	**0,2546**	0,5352	**0,0984**	0,5862	**0,1657**	0,5829	***	*	*
EPS	**0,3509**	1,0318	**0,1715**	0,8916	**0,1822**	0,7046	**	**	
ROCE	**0,1206**	0,2715	**0,0773**	0,2235	**0,0923**	0,1835	**	*	
Liquidity									
CUR	1,4871	0,5078	1,4952	0,6156	1,4749	0,5361			
CASH	**0,4178**	0,3413	**0,3585**	0,2929	**0,4122**	0,3253	**		**
QUI	1,1501	0,4680	1,1340	0,4209	1,1221	0,4364			
CFSH	0,7359	0,8588	0,7064	1,7137	0,7076	1,4960			

CFM	**0,1251**	0,1854	**0,0864**	0,2589	**0,1005**	0,2452	**	*	
WCR	5,9920	19,1633	6,7702	15,6804	6,9549	19,8159			
STOCKT	2,7492	2,6516	2,7520	2,6564	2,6989	2,6648			
Leverage									
DEBT	**3,3747**	1,6221	3,4578	1,7529	**3,5589**	1,7747		*	
ETL	**1,1880**	1,8164	**1,0084**	1,5471	1,0759	1,6334	*		
TLSFU	1,3366	2,1369	1,1215	6,8125	1,3917	3,2855			
CGEAR	**0,9573**	1,6562	**1,2487**	2,7880	1,1232	1,7964	*		
CLSFU	0,7065	1,1798	0,6645	2,0228	0,6816	1,6397			
INTCOV	**6,3387**	11,2326	**3,9382**	13,1282	**4,0268**	7,5237	**	***	
IGEAR	0,1727	0,3255	0,1457	2,1330	0,1966	2,1494			
DEBTE	0,7189	1,4527	0,8665	3,1022	0,8422	4,4277			
DSFU	**0,5207**	0,7484	**0,6849**	1,7760	**0,6870**	2,1055	*	*	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% level respectively.

Panel C: All Countries (2004-2009)									**Pair-wise *t*-tests for equality of means**					
	Australia		**Germany**		**Greece**		**UK**							
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Aus vs Ger**	**Aus vs Gr**	**Aus vs UK**	**Ger vs Gr**	**Ger vs UK**	**Gr vs UK**
Test Variables														
Accruals	-0,0114	1,7388	0,0126	0,5080	0,0158	0,6711	0,0138	1,0175						
FFS	**0,1842**	0,3877	**0,0627**	0,2425	**0,1740**	0,3792	**0,0881**	0,2835	***		***	***	***	***
Big 4	**0,5307**	0,4991	**0,5602**	0,4965	**0,2130**	0,4096	**0,8725**	0,3336	**	***	***	***	***	***
Insider Trading Value (ITV)	**2,7635**	18,7463	**5,0400**	60,1067	**4,9329**	24,4435	**1,8403**	6,5675	*	***	**		**	***
COC	**0,9976**	6,9412	**0,3310**	0,5124	**0,2149**	0,7964	**0,3165**	1,2332	***	***	***	***		**
Control variables														
Size														
SALESHA	**1,4425**	2,1856	**4,1951**	3,1020	**2,7112**	2,2620	**2,8333**	2,2866	***	***	***	***	***	***
NAVSH	**1,5536**	3,9219	**9,3396**	12,6464	**3,1251**	6,3460	**1,5175**	1,6544	***	***		***	***	***
SALETAS	**0,8759**	1,2022	**1,1246**	0,6426	1,1097	10,9503	**1,0445**	0,6929	***		***		***	
RESTAS	**0,2752**	2,1716	**0,2895**	0,6935	0,4734	8,0402	**0,1699**	0,3796			**		***	
RESSFU	**0,0784**	0,5733	**0,3192**	0,4697	**0,3461**	0,2517	**0,2450**	1,0156	***	***	***	*	***	***
LNMV	**3,5640**	3,0035	**4,5987**	2,3555	**3,8661**	1,5920	**5,7831**	2,1976	***	***	***	***	***	***
Investment														
DIVSH	**0,0635**	0,2459	**0,6406**	3,1358	**0,1154**	0,3742	**0,2787**	0,2726	***	***	***	***	***	***
DIVYI	**0,0316**	0,2393	**0,0213**	0,0816	**0,0318**	0,1206	**0,2971**	0,2722	**		***	***	***	***
DIVCOV	0,9362	4,7916	1,1419	4,8151	0,8901	8,6770	1,1093	2,2300						
PE	**4,8607**	22,4035	**10,6553**	22,1388	**12,5039**	28,1676	**9,3747**	16,7427	***	***	***	**	**	***
HOLTA	**0,0373**	0,1301	**0,0529**	0,1748	**0,1257**	0,5958	**0,1451**	0,2443	***	***	***	***	***	
Growth														
MVBV	**2,9724**	9,8673	**2,0683**	12,4978	**3,4657**	9,1149	**1,3592**	10,4840	***		***	***	**	***
Profitabilit														
PLOWB	**4,1889**	16,0375	**0,9306**	10,0211	**0,9136**	14,5501	**1,2704**	7,6953	***	***	***			
OPM	**-0,6819**	2,4259	**0,0255**	0,9221	**0,2557**	7,4707	**0,1248**	0,5020	***	***	***		***	
NPM	**-1,2310**	3,0528	**0,0157**	2,0396	**0,0102**	1,8532	**0,0558**	0,2973	***	***	***			

ROSC	**-0,1452**	1,4121	**0,0657**	0,9176	**-0,1247**	6,0008	**0,1978**	0,5686	***		***		***	**
EPS	**0,0167**	0,9479	**1,2819**	7,1607	**0,1656**	0,8940	**0,2659**	0,8778	***	***	***	***	***	***
ROCE	**-0,1204**	1,8913	**0,0682**	0,5457	**0,0672**	0,2458	**0,1087**	0,1966	***	***	***		***	***
Liquidity														
CUR	**3,8190**	6,1300	**2,2024**	4,4417	**2,9403**	5,9440	**1,4239**	0,5390	***	***	***	***	***	***
CASH	**1,2598**	3,6996	**1,5331**	21,6682	**0,4219**	2,6959	**0,4077**	0,3384		***	***	*	**	
QUI	**3,3506**	6,1616	**1,6615**	4,1127	**2,4264**	5,8597	**1,1344**	0,4175	***	***	***	***	***	***
CFSH	**0,1750**	1,2437	**2,5006**	7,8516	**0,5386**	1,6810	**0,6633**	1,1856	***	***	***	***	***	**
CFM	**-1,2384**	6,5048	**0,0654**	1,5653	**0,1646**	1,9182	**0,1210**	0,2542	***	***	***	*		
WCR	**3,3502**	13,9731	**4,7366**	27,1421	**1,8536**	14,3355	**5,1773**	15,2927	**	***	***	***		***
STOCKT	**7,4839**	14,1000	**3,1150**	2,3669	**7,4890**	11,0576	**2,7913**	2,6906	***		***	***	***	***
Leverage														
DEBT	**9,3896**	12,4729	**4,6842**	2,6222	**3,3288**	3,8502	**3,5449**	1,7122	***	***	***	***	***	**
ETL	**6,2125**	13,3423	**1,2381**	1,9417	**2,0445**	8,8637	**1,0445**	1,4661	***	***	***	***	***	***
TLSFU	**0,8159**	2,3584	**1,4686**	4,5334	**1,2508**	1,8895	1,2626	3,8597	***	***	***			
CGEAR	0,6609	4,2627	0,8029	2,8143	**0,6182**	0,5344	**1,0357**	2,2792			***	**	***	***
CLSFU	**0,5331**	2,7693	**0,8015**	3,6277	**0,8095**	1,5525	0,6844	2,2516	***	***	**			*
INTCOV	**0,9498**	17,3322	**5,0785**	24,9232	**2,9466**	10,6849	**3,9564**	8,2925	***	***	***	***	*	***
IGEAR	0,1081	1,6658	**0,1391**	2,1971	**0,4234**	4,2568	**0,1704**	1,2749		***		***		**
DEBTE	**0,3093**	1,0499	**1,0525**	4,4245	**1,0019**	8,8931	0,7552	2,4809	***	***	***		**	
DSFU	**0,2945**	1,1149	**0,6324**	3,3248	**0,6849**	8,8077	0,5955	1,7217	***	**	***			

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% level respectively.

Panel D:IFRS in US							**Pair-wise *t*-tests for equality of means**		
	2006 - US GAAP		**2007 - IFRS**		**2008 - IFRS**				
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2006 vs 2007**	**2006 vs 2008**	**2007 vs 2008**
Test Variables									
ΔNP/ΔOCF	**1,2398**	5,2268	**0,2605**	8,2668	**0,7054**	13,4514		*	*
Accruals	-0,0163	0,0523	-0,0188	0,0489	-0,0271	0,0632			
OCF	**-0,2489**	3,3118	**0,1247**	0,6612	**0,0965**	0,4082	*	*	
LNL	**0,0392**	0,1946	**0,0294**	0,1694	0,0392	0,1946	*		
SPP	0,0637	0,2449	0,1029	0,3046	0,1324	0,3397			
Control variables									
Size									
SALESHA	**6,3755**	6,6614	**5,1657**	4,6842	**5,7634**	4,9065	**	**	*
NAVSH	3,8700	3,7502	3,7282	3,5341	4,1245	4,4827			
SALETAS	0,7526	0,4408	0,7442	0,4642	0,7900	0,4733			
RESTAS	-0,0448	0,9438	-0,0262	0,9782	-0,0448	1,0343			
RESSFU	0,1007	1,3726	**-0,0115**	1,4462	**0,1724**	1,5306			*
Investment									
DIVSH	**0,3291**	0,5008	**0,4118**	0,5419	0,3835	0,5274	*		
DIVYI	**0,1047**	0,1561	**0,0140**	0,0360	**0,0287**	0,0673	***	***	***
DIVCOV	**1,6246**	1,7349	**2,0997**	4,5990	**0,9954**	2,0745		***	***
PE	0,3630	0,6833	0,3513	0,9337	0,2494	1,9770			
HOLTA	**0,0129**	0,0149	**0,0190**	0,0213	**0,0182**	0,0200	***	***	
Growth									

MVBV	**1,3805**	7,5271	**3,9436**	5,2949	**3,1402**	5,8878	***	**	*
Profitability									
PLOWB	**1,6989**	2,2698	**2,7776**	5,6659	**1,6249**	5,1562	**		**
OPM	**0,1177**	0,1636	**0,1093**	0,1829	**0,0571**	0,1939		***	***
NPM	**0,0927**	0,1394	**0,0802**	0,1983	**0,0365**	0,1522		***	**
ROSC	0,1799	1,2195	0,1777	0,5806	0,0636	1,1529			
EPS	**1,0483**	1,4914	**1,2400**	1,9173	**1,0355**	2,5095	*	*	*
ROCE	0,1515	0,4402	0,1458	0,5388	0,1232	0,4102			
Liquidity									
CUR	**0,9069**	0,5862	**2,0026**	3,5788	**1,2742**	0,6746	***	***	***
CASH	**0,3619**	0,3014	**0,3858**	0,3577	**0,5268**	0,4727		***	***
QUI	**3,9965**	4,3084	**6,0238**	8,2109	**3,6424**	3,6913	***		***
CFSH	**1,3684**	1,6741	**1,9886**	2,6352	**1,8856**	2,9137	***	**	
CFM	**0,1527**	0,1842	**0,1468**	0,2283	**0,0948**	0,2026		***	**
WCR	**1,6138**	4,0302	0,3467	2,5336	**0,0200**	2,1134		***	
STOCKT	3,3925	2,4596	3,4070	2,6225	3,2502	2,3826			
Leverage									
DEBT	**4,6150**	2,3493	**5,2159**	2,8533	**4,7356**	2,5511	**		*
ETL	**1,1936**	1,3568	**0,6404**	0,4906	**0,5879**	0,4668	***	***	
TLSFU	1,5389	2,2998	1,8722	6,0808	1,6348	4,3461			
CGEAR	1,5915	5,4155	1,5070	5,5188	1,8397	6,8371			
CLSFU	0,7739	1,2277	0,8321	1,9380	0,7938	5,9079			
INTCOV	5,9204	11,2331	**6,4715**	12,6248	**4,5755**	11,9053			*
IGEAR	0,1356	0,2294	0,1536	0,3995	0,1388	3,2133			
DEBTE	**0,4320**	0,4711	**0,5755**	1,1903	**0,6784**	1,3479	*	**	
DSFU	0,5124	0,8900	0,4848	0,7564	0,5259	1,3144			

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel E:

1. European & Australian Banking sector (IFRS)							**Pair-wise *t*-tests for equality of means**		
	2007		**2008**		**2009**				
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2007 vs 2008**	**2007 vs 2009**	**2008 vs 2009**
Test Variables									
Accruals	0,0626	0,9070	-0,0065	0,0566	-0,0445	0,1472			
CAR	**0,0087**	0,0484	**-0,0318**	0,1376	**-0,0103**	0,0281	**	***	*
Control variables									
Size									
SALESHA	**9,4460**	12,8377	**8,6042**	14,8736	**10,1828**	15,8281		*	*
NAVSH	8,2184	12,9330	8,7666	14,0453	9,3707	15,7120			
SALETAS	0,2154	0,3142	0,2034	0,3433	0,2101	0,3042			
RESTAS	0,0434	0,1136	0,0589	0,1645	0,0503	0,1390			

RESSFU	0,1609	0,1947	0,1801	0,2100	0,1758	0,2055			
LNMV	**8,8493**	3,3781	**8,2710**	3,3995	**8,5300**	3,4497	*		*
Profitability									
PLOWB	**1,1404**	2,9759	1,9705	7,1520	**2,0736**	3,7609		*	
OPM	**0,3594**	1,6289	**0,0143**	2,0810	**-0,0053**	0,5873	*	**	
NPM	**0,3110**	1,6245	**0,0150**	1,9452	-0,0047	0,5327	*		
ROSC	**0,1877**	0,1751	**0,0683**	0,2294	0,0800	0,2421	***		
EPS	**1,6286**	4,1021	**0,4753**	1,9504	**0,7385**	4,4497	**	*	
ROCE	0,1476	0,2497	**0,1114**	0,2176	**0,0836**	0,2030			*
Leverage									
DEBT	**3,7011**	5,4081	**2,3358**	7,9177	**3,7385**	6,9544	*		*
ETL	1,1730	4,3141	1,2940	4,8429	1,3997	5,5359			
TLSFU	12,4919	11,4362	**13,6810**	13,1320	**11,5572**	10,3651			*
CGEAR	5,6656	9,6875	5,7180	9,7924	5,1781	10,6149			
CLSFU	4,5918	6,9796	4,9426	7,9342	4,9324	8,4543			
INTCOV	4,5224	8,9029	3,6307	10,7104	3,8816	10,5894			
IGEAR	2,1836	3,4455	2,0347	12,8117	1,8294	5,4628			
DEBTE	3,7580	7,4263	3,6511	6,5135	3,2350	5,5741			
DSFU	**2,9608**	5,7496	2,8284	5,1374	**2,5110**	4,4178		*	

2.Banking sector US (US GAAP)							**Pair-wise *t*-tests for equality of means**		
	2007		**2008**		**2009**				
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2007 vs 2008**	**2007 vs 2009**	**2008 vs 2009**
Test Variables									
Accruals	0,0290	0,0160	-0,0333	0,0255	0,0548	0,0242			
CAR	**0,0110**	0,0111	**-0,0094**	0,0322	**0,0092**	0,0239	***		***
Control variables									
Size									
SALESHA	14,0267	12,9493	13,2962	12,2992	13,5868	14,2227			
NAVSH	17,5529	14,0432	18,2511	14,0597	18,9237	14,7459			
SALETAS	**0,0770**	0,0403	**0,0690**	0,0434	**0,0666**	0,0444	**	***	
RESTAS	**0,0628**	0,0755	**0,0464**	0,0518	**0,0625**	0,0645	***		***
RESSFU	**0,3162**	0,1460	**0,2788**	0,3562	**0,3396**	0,1579	***	*	***
LNMV	**5,6346**	1,9954	**5,2289**	2,1793	**5,1102**	2,2424	**	***	
Profitability									
PLOWB	5,0176	8,5125	**4,9501**	16,3546	**3,3625**	16,3536			*
OPM	**0,1586**	0,1206	**0,0357**	0,2925	**0,0339**	1,1710	***	*	
NPM	**0,1175**	0,1519	**0,0161**	0,2496	**0,0061**	0,7693	***	**	
ROSC	**0,0866**	0,0693	**-0,0129**	0,7339	**-0,0080**	0,1401	**	***	
EPS	**2,0720**	9,5006	**-1,2138**	10,5334	**-2,0086**	10,0603	***	***	*
ROCE	**0,0785**	0,0579	0,1290	1,2829	**0,0632**	0,0745		***	

Leverage									
DEBT	4,3062	10,1947	**3,8830**	8,6429	**5,5565**	16,4834			*
ETL	0,2147	1,3567	0,1290	0,1882	0,1280	0,1798			
TLSFU	**6,6356**	3,0753	**7,0992**	4,4357	**6,4547**	2,6911	*		**
CGEAR	**4,5214**	3,1173	**5,0769**	4,6387	**4,5149**	2,8354	*		*
CLSFU	1,2721	2,3009	1,2322	3,0084	1,4046	2,5596			
INTCOV	**0,9942**	5,5750	0,4632	4,1263	**0,2244**	2,6517		**	
IGEAR	**2,8734**	10,3516	2,6766	11,5962	**1,0250**	10,5676		**	
DEBTE	1,0596	2,3173	1,1205	2,4683	1,1544	2,9577			
DSFU	0,7396	1,6447	0,9668	3,5510	0,7261	1,7581			
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.									

Panel F

1. Europe & Australia	**2010**		**2011**		**2012**		**2013**		**Pair-wise *t*-tests for equality of means**	
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2010 vs 2011**	**2012 vs 2013**
Test Variables										
Tobin's q	**0,9761**	2,1608	**-0,0770**	0,4893	**0,1566**	0,4767	**0,2834**	0,8232	***	*
Accruals	0,0325	0,8651	-0,0022	0,3418	0,0140	0,2509	-0,0182	0,2064		
OCF	**-0,3276**	3,5184	**0,4007**	2,4265	-0,2061	7,9176	-1,1311	7,1782	**	
Control variables										
Size										
SALESHA	**2,4995**	6,8140	**1,7553**	3,2208	**1,5935**	3,3716	**2,1995**	5,5660	*	*
NAVSH	3,2858	4,6439	3,3188	4,8343	**2,6308**	3,4083	**3,6753**	6,2373		**
SALETAS	0,3580	0,4895	0,3932	0,5493	0,3569	0,4704	0,3807	0,7781		
RESTAS	0,1416	0,3844	0,1562	0,3927	0,4615	3,9679	0,4391	3,3969		
RESSFU	**0,1631**	0,3641	**0,2414**	0,6585	0,2390	1,0429	0,3922	2,4008	*	
LNMV	4,2516	2,5032	4,0669	2,5423	4,1261	2,6217	4,3301	2,6733		
Investment										
DIVSH	0,1565	0,3908	0,1997	0,4655	**0,1560**	0,3656	**0,2398**	0,7625		*
DIVYI	**0,0434**	0,2284	**0,1313**	0,8562	0,0615	0,3146	0,3131	3,0782	*	
DIVCOV	**2,6583**	4,6197	**0,7022**	8,5390	**1,4454**	3,6099	**3,3562**	5,1494	*	***
PE	4,6224	12,8750	4,2632	15,0398	5,8444	14,6305	7,5869	18,8559		
HOLTA	0,4045	0,3724	0,3753	0,3642	0,3588	0,3621	0,3798	0,3761		
Growth										
MVBV	2,5026	3,9412	2,3390	6,1450	**1,9688**	3,3373	**3,4750**	9,0268		**
Profitability										
PLOWB	2,7562	5,6355	3,4022	10,0953	1,4610	6,8146	1,8668	9,0823		
OPM	0,2703	1,4899	0,3530	3,0212	**-0,6920**	4,8534	**-1,5424**	7,6635		*
NPM	0,2232	1,4688	0,3195	2,9938	**-0,7384**	4,4794	**-1,5563**	7,6013		*

ROSC	0,0706	1,0639	0,1026	0,7535	**0,0245**	0,5187	**-0,1673**	1,5831		*
EPS	**0,2681**	1,2223	**0,0941**	0,9998	**0,0430**	2,0113	**0,3334**	1,6086	*	*
ROCE	0,0366	0,2326	0,0813	0,4434	**0,0206**	0,4875	**-0,0899**	0,6486		*
Liquidity										
CUR	**3,6911**	5,7514	**5,3105**	13,4922	**5,7880**	9,2804	**8,6917**	19,5506	*	*
CASH	3,5678	10,3184	3,0409	7,9431	2,6508	6,6836	3,0537	7,1423		
CFSH	**0,4127**	1,3762	**0,2059**	1,0990	0,3034	1,0906	0,4614	1,7480	*	
CFM	0,5978	6,3433	0,2795	3,0208	**-0,0665**	5,9241	**-2,4482**	13,1110		**
WCR	0,4412	2,6590	0,7384	6,0068	1,1733	8,2958	1,1960	6,4237		
Leverage										
DEBT	4,1126	7,3584	5,1023	10,0280	3,7403	5,8653	4,7260	10,2962		
ETL	3,5995	10,8018	3,7849	7,3954	**4,8511**	6,7386	**7,1994**	13,4620		**
TLSFU	0,4369	8,3872	-0,0543	14,1141	1,2695	5,0495	1,3572	4,7638		
CGEAR	0,7641	1,7216	0,7070	1,6432	0,7722	3,6078	0,7831	2,8314		
CLSFU	0,3274	1,9696	0,2408	3,1624	0,3701	2,2452	0,4809	2,7412		
INTCOV	4,6820	9,3912	4,5365	16,0057	3,0828	9,5009	4,8006	17,2822		
IGEAR	**0,4061**	2,7655	**0,0478**	2,0834	0,1917	0,8442	0,0967	1,1067	*	
DEBTE	0,8661	3,2858	0,8829	3,0187	**0,7605**	2,4032	**1,3020**	4,7912		*
DSFU	0,5368	2,3208	-0,3019	11,2847	0,9547	4,3764	1,1115	4,7225		

									Pair-wise *t*-tests for equality of means	
2. US	**2010**		**2011**		**2012**		**2013**			
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2010 vs 2011**	**2012 vs 2013**
Test Variables										
Tobin's q	**0,3806**	0,9293	**0,1009**	0,3881	**0,2672**	0,5202	**0,4195**	0,9144	***	**
Accruals	-0,0252	0,1206	0,0208	0,6571	0,0299	0,5773	-0,0147	0,1469		
OCF	0,0777	0,1961	0,0635	0,2628	**0,0647**	0,1547	**0,1371**	0,7936		*
Control variables										
Size										
SALESHA	**9,9029**	10,8065	**8,1300**	7,8484	**8,3826**	8,5415	**9,5764**	10,9833	*	*
NAVSH	14,9496	15,7529	14,3562	11,1738	**13,8841**	10,6841	**15,6440**	13,6162		*
SALETAS	0,4596	1,5334	0,5441	2,6398	0,4710	1,8407	0,3773	1,0468		
RESTAS	0,4491	0,6882	0,4328	0,4712	0,4267	0,4459	0,4103	0,3447		
RESSFU	0,4472	0,2801	0,4556	0,2233	0,4607	0,2396	0,4537	0,2116		
LNMV	6,9994	1,9321	6,8808	1,8973	**7,0810**	1,8693	**7,3570**	1,7819		*
Investment										
DIVSH	**1,5147**	3,4131	**1,1565**	1,6606	**1,1095**	1,0856	**1,3395**	2,4611	*	*
DIVYI	0,0625	0,1525	0,0686	0,1868	**0,0801**	0,2418	**0,0524**	0,1306		*
DIVCOV	0,3272	8,0780	0,7682	3,1023	**0,6072**	1,8374	**1,2453**	2,3262		***
PE	11,2206	28,0425	10,0009	21,9310	**10,8266**	28,5366	**19,1688**	25,9597		***
HOLTA	0,1729	0,2569	0,1734	0,2585	0,1820	0,2685	0,1566	0,2473		

Growth										
MVBV	**2,2187**	4,3864	**1,6618**	2,5499	**1,8736**	3,0659	**2,5167**	5,0445	*	*
Profitability										
PLOWB	0,4926	17,5764	1,8518	10,0812	1,1128	11,7616	1,8362	18,6106		
OPM	**0,3738**	1,8029	**0,1435**	0,4902	0,1380	0,5178	0,2816	1,9560	*	
NPM	**0,1642**	0,6524	**0,0919**	0,3355	0,1163	0,2834	0,1241	1,4846	*	
ROSC	0,1816	0,9440	0,1599	0,9441	0,0920	0,2977	0,1540	0,7496		
EPS	1,0345	6,1476	1,2666	4,7187	**1,1949**	2,5525	**1,5937**	2,6941		*
ROCE	0,0637	0,3519	0,1360	0,9100	**0,0410**	0,1409	**0,0865**	0,4534		*
Liquidity										
CUR	**2,1270**	3,0401	**1,7802**	2,2448	**1,7503**	2,3482	**2,0818**	3,0610	*	*
CASH	0,8118	1,6535	0,6514	1,1195	0,7193	1,5329	0,7571	1,4911		
CFSH	2,2626	4,3376	1,8860	4,1456	**2,3649**	3,3595	**2,8581**	3,6546		*
CFM	0,3278	0,6403	0,2577	0,9349	0,2077	2,2912	0,3104	1,5076		
WCR	-0,0241	5,6413	-0,0222	3,4482	0,1858	10,4779	-0,6713	3,9930		
Leverage										
DEBT	2,2743	3,1870	1,8998	2,0280	2,3980	4,0269	2,0485	2,5955		
ETL	1,2921	2,1782	1,3355	2,2500	1,3051	2,4328	1,2988	2,3937		
TLSFU	1,7590	4,1988	1,9657	6,4936	1,7623	6,2984	1,7548	4,0080		
CGEAR	**1,1359**	2,5038	**0,8716**	1,2608	0,8240	2,5143	0,7815	1,0279	*	
CLSFU	0,7125	3,7392	0,8876	2,2867	0,8519	2,0988	0,8289	2,4160		
INTCOV	**6,1354**	23,6873	**2,6423**	16,8249	4,6584	18,3497	4,7883	9,9091	*	
IGEAR	0,2503	3,5386	0,0891	4,5429	**0,0984**	4,5515	**0,5727**	2,5750		*
DEBTE	1,0032	1,7897	1,1632	2,2921	1,0381	2,6933	1,0267	4,2688		
DSFU	**0,4864**	0,9899	**0,7369**	1,4637	0,6824	1,9402	0,6506	2,0856	**	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 3 – H1 Results

Panel A:Test 1a - Multinomial Logistic Regression

1.Australia

Reference year	*2004*
Cases Included in Analysis	*2.555*
Missing Cases	*181*
Total	*2.736*
Accuracy Rate	*43,4 %*

	2005			2006			2007			2008			2009		
Variable	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**
FFS	**-0,579**	**	0,56	**-0,414**	*	0,661	**0,759**	***	2,137	**0,497**	**	1,644	**0,415**	*	1,514
	(0,249)			(0,253)			(0,240)			(0,224)			(0,233)		

2.Germany

Reference year	*2004*
Cases Included in Analysis	*2.222*
Missing Cases	*202*
Total	*2.424*
Accuracy Rate	*47,8%*

	2005			2006			2007			2008			2009		
Variable	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**
FFS	**-0,907**	*	0,404	**-0,796**	*	0,451	**0,887**	**	2,429	**0,819**	**	2,269	**0,838**	**	2,311
	(0,466)			(0,486)			(0,347)			(0,341)		0,334			

3.Greece

Reference year	*2004*
Cases Included in Analysis	*1.222*
Missing Cases	*8*
Total	*1.230*
Accuracy Rate	*48,9%*

	2005			2006			2007			2008			2009		
Variable	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**	**Coef.**	**Sig.**	**Exp(B)**
FFS	**-0,518**	*	0,596	**-0,634**	**	0,53	**-1,376**	***	0,253	**-1,435**	***	0,238	**-1,174**	***	0,309
	(0,285)			(0,289)			(0,327)			(0,329)			(0,296)		

4. UK

Reference year	*2004*
Cases Included in Analysis	*1.572*
Missing Cases	*210*
Total	*1.782*
Accuracy Rate	*42,4%*

	2005	2006	2007	2008	2009

Variable	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)
FFS	**0,947**	*	2,579	**1,399**	***	4,049	**1,271**	**	3,563	**1,734**	***	5,655	**2,923**	***	18,598
	(0,500)			(0,494)			(0,492)			(0,463)			(0,453)		
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.															

Panel B: Test 1b - Logistic Regression

1.Australia

2004				**2005**				**2006**			
Dependent variable	FFS			*Dependent variable*	FFS			*Dependent variable*	FFS		
Cases Included in Analysis	437			*Cases Included in Analysis*	405			*Cases Included in Analysis*	443		
Missing Cases	19			*Missing Cases*	51			*Missing Cases*	13		
Total	456			*Total*	456			*Total*	456		
Accuracy Rate	83,10%			*Accuracy Rate*	87,20%			*Accuracy Rate*	85,60%		
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
SALESHA	**-1,341**	***	0,262	SALESHA	**-1,132**	***	0,323	SALESHA	**-1,271**	***	0,281
	(0,396)				(0,351)				(0,481)		
NAVSH	**-0,715**	***	0,489	SALETAS	**-0,337**	**	0,714	LNMV	**-1,060**	***	0,347
	(0,222)				(0,150)				(0,156)		
LNMV	**-0,774**	***	0,461	LNMV	**-0,846**	***	0,429	ROSC	**-0,281**	**	0,755
	(0,134)				(0,133)				(0,114)		
HOLTA	**2,122**	***	8,350	DIVCOV	**-0,186**	**	0,831	EPS	**-1,107**	**	0,331
	(0,722)				(0,090)				(0,510)		
OPM	**-0,126**	**	0,881	OPM	**-0,053**	***	0,948	CFM	**-0,017**	*	0,983
	(0,049)				(0,018)				(0,009)		
EPS	**-3,243**	***	0,039	EPS	**-0,948**	***	0,388	CGEAR	**0,333**	***	1,395
	(0,831)				(0,304)				(0,102)		
ROCE	**-0,740**	**	0,477	QUI	**-0,188**	***	0,829	CLSFU	**1,051**	*	2,861
	(0,295)				(0,069)				(0,596)		
CUR	**-0,133**	**	0,876	WCR	**-0,008**	**	0,992	Constant	**0,782**	*	2,185
	(0,059)				(0,004)				(0,402)		
CFSH	**-3,730**	***	0,024	CGEAR	**1,039**	***	2,827				
	(1,197)				(0,328)						
WCR	**-0,030**	***	0,971	CLSFU	**0,359**	**	1,432				
	(0,010)				(0,147)						
CLSFU	**0,874**	*	2,397	Constant	-0,048		0,954				
	(0,469)				(0,396)						
DEBTE	**0,841**	**	2,318								
	(0,350)										
Constant	-0,846	**	0,429								
	(0,417)										

2007		**2008**		**2009**	
Dependent variable	FFS	*Dependent variable*	FFS	*Dependent variable*	FFS
Cases Included in Analysis	456	*Cases Included in Analysis*	437	*Cases Included in Analysis*	435

Missing Cases			0	*Missing Cases*			19	*Missing Cases*			21
Total			456	*Total*			456	*Total*			456
Accuracy Rate			82,00%	*Accuracy Rate*			74,60%	*Accuracy Rate*			81,60%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
SALESHA	**-2,681**	***	0,069	SALESHA	**-1,471**	***	0,230	SALESHA	**-2,875**	***	0,056
	(0,667)				(0,323)				(0,630)		
NAVSH	**-1,395**	***	0,248	NAVSH	**-0,839**	***	0,432	LNMV	**-0,860**	***	0,423
	(0,450)				(0,191)				(0,123)		
LNMV	**-1,038**	***	0,354	LNMV	**-1,024**	***	0,359	HOLTA	**-3,212**	*	0,040
	(0,155)				(0,146)				(1,726)		
ROSC	**-0,851**	**	0,427	ROSC	**-0,494**	***	0,610	ROSC	**-0,364**	***	0,695
	(0,342)				(0,163)				(0,130)		
EPS	**-3,442**	***	0,032	EPS	**-3,782**	***	0,023	EPS	**-0,079**	***	0,924
	(0,995)				(0,772)				(0,030)		
CFM	**-0,048**	***	0,954	CUR	**-0,014**	*	0,987	CFSH	**-4,903**	***	0,007
	(0,018)				(0,009)				(1,269)		
ETL	**-0,087**	***	0,917	ETL	**-0,102**	***	0,903	CGEAR	**0,151**	**	1,163
	(0,030)				(0,028)				(0,069)		
TLSFU	**-3,104**	***	0,045	CLSFU	**-1,769**	***	0,171	CLSFU	**0,745**	***	2,107
	(1,064)				(0,556)				(0,253)		
Constant	1,816	***	6,150	DEBTE	**-1,919**	***	0,147	Constant	0,391		1,478
	(0,446)				(0,531)				(0,319)		
				Constant	2,199	***	9,016				
					(0,423)						

2.Germany

2004				**2005**				**2006**			
Dependent variable			FFS	*Dependent variable*			FFS	*Dependent variable*			FFS
Cases Included in Analysis			372	*Cases Included in Analysis*			364	*Cases Included in Analysis*			387
Missing Cases			32	*Missing Cases*			40	*Missing Cases*			17
Total			404	*Total*			404	*Total*			404
Accuracy Rate			93,50%	*Accuracy Rate*			98,10%	*Accuracy Rate*			98,20%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
SALESHA	**-0,296**	***	0,744	DIVCOV	**-0,252**	*	0,777	SALESHA	**-0,101**	*	0,904
	(0,114)				(0,172)				(0,054)		
NAVSH	**-0,149**	***	0,861	PLOWB	**0,130**	**	1,139	RESTAS	**-1,662**	**	0,190
	(0,054)				(0,059)				(0,791)		
SALETAS	**-1,331**	**	0,264	ROSC	**1,873**	***	6,510	PLOWB	**0,565**	***	1,759
	(0,545)				(0,432)				(0,174)		
OPM	**-4,030**	***	0,018	CUR	**-0,923**	**	0,397	CUR	**-3,159**	**	0,042
	(1,362)				(0,435)				(1,242)		
CASH	**-0,702**	**	0,496	ETL	**0,735**	***	2,085	INTCOV	**-0,022**	*	0,978
	(0,327)				(0,226)				(0,012)		
ETL	**-0,623**	**	0,536	Constant	-4,986	***	0,007	Constant	-1,369	**	0,254

	(0,263)				(0,975)				(0,686)		
CLSFU	**-1,045**	***	0,352								
	(0,285)										
Constant	-2,097	**	0,123								
	(1,037)										

2007				**2008**				**2009**			
Dependent variable			FFS	*Dependent variable*			FFS	*Dependent variable*			FFS
Cases Included in Analysis			378	*Cases Included in Analysis*			374	*Cases Included in Analysis*			383
Missing Cases			26	*Missing Cases*			30	*Missing Cases*			21
Total			404	*Total*			404	*Total*			404
Accuracy Rate			91,30%	*Accuracy Rate*			89,60%	*Accuracy Rate*			89,60%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
LNMV	**-0,821**	***	0,440	*SALESHA*	**0,292**	**	1,339	*SALETAS*	**0,871**	**	2,390
	(0,305)				(0,143)				(0,442)		
OPM	**-3,503**	**	0,030	*RESTAS*	**2,593**	***	13,365	*RESTAS*	**0,528**	**	1,695
	(1,757)				(0,914)				(0,239)		
CASH	**1,029**	**	2,799	*DIVSH*	**0,556**	**	1,744	*RESSFU*	**1,663**	**	5,274
	(0,414)				(0,257)				(0,697)		
QUI	**2,059**	**	7,834	*NPM*	**-3,898**	*	0,020	*DIVCOV*	**-0,085**	*	0,918
	(0,871)				(1,996)				(0,045)		
STOCKT	**0,412**	**	1,510	*CUR*	**-0,645**	**	0,525	*PLOWB*	**-0,029**	**	0,972
	(0,184)				(0,277)				(0,011)		
ETL	**0,785**	**	2,193	*CFSH*	**-0,278**	*	0,757	*NPM*	**-5,815**	***	0,003
	(0,336)				(0,148)				(2,168)		
CGEAR	**0,630**	**	1,878	*DEBT*	**-0,415**	**	0,660	*EPS*	**-0,150**	*	0,861
	(0,310)				(0,172)				(0,084)		
CLSFU	**0,437**	**	1,548	*TLSFU*	**-0,376**	***	0,687	*ROCE*	**-3,046**	**	0,048
	(0,179)				(0,130)				(1,279)		
Constant	-1,513		0,220	*INTCOV*	**-0,040**	***	0,961	*TLSFU*	**-0,849**	***	0,428
	(1,215)				(0,014)				(0,230)		
				Constant	-1,348		0,260	*CGEAR*	**-0,430**	**	0,650
					(1,154)				(0,217)		
								Constant	-4,464	***	0,012
									(0,720)		

3.Greece

2004				**2005**				**2006**			
Dependent variable			FFS	*Dependent variable*			FFS	*Dependent variable*			FFS
Cases Included in Analysis			196	*Cases Included in Analysis*			198	*Cases Included in Analysis*			201
Missing Cases			6	*Missing Cases*			7	*Missing Cases*			4
Total			205	*Total*			205	*Total*			205
Accuracy Rate			74,00%	*Accuracy Rate*			82,80%	*Accuracy Rate*			83,10%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**

SALETAS	**-1,604**	**	0,201	*NAVSH*	**-0,359**	**	0,698	*LNMV*	**-0,583**	**	0,558
	(0,669)				(0,181)				(0,272)		
LNMV	**-0,455**	**	0,634	*SALETAS*	**-1,147**	*	0,318	*DIVCOV*	**0,060**	**	1,061
	(0,211)				(0,652)				(0,026)		
NPM	**-7,532**	***	0,001	*PE*	**-0,019**	**	0,982	*MVBV*	**-0,231**	*	0,794
	(2,450)				(0,009)				(0,119)		
QUI	**-0,748**	*	0,473	*MVBV*	**-0,375**	***	0,687	*CUR*	**-2,653**	***	0,070
	(0,445)				(0,119)				(0,920)		
CFSH	**-1,238**	**	0,290	*CUR*	**-1,960**	**	0,141	*CFSH*	**-6,037**	***	0,002
	(0,577)				(0,884)				(1,759)		
ETL	**-0,234**	**	0,791	*CASH*	**-8,065**	**	0,000	*TLSFU*	**0,667**	**	1,949
	(0,107)				(3,484)				(0,277)		
CGEAR	**-3,212**	***	0,040	*WCR*	**-0,037**	**	0,963	*Constant*	0,827		2,288
	(1,200)				(0,017)				(1,170)		
Constant	2,330	**	10,282	*IGEAR*	**-0,223**	**	0,800				
	(1,036)				(0,105)						
				DSFU	**-2,005**	**	0,135				
					(1,025)						
				Constant	1,014		2,756				
					(0,925)						

2007				**2008**				**2009**			
Dependent variable			FFS	*Dependent variable*			FFS	*Dependent variable*			FFS
Cases Included in Analysis			202	*Cases Included in Analysis*			204	*Cases Included in Analysis*			203
Missing Cases			3	*Missing Cases*			4	*Missing Cases*			2
Total			205	*Total*			205	*Total*			205
Accuracy Rate			89,60%	*Accuracy Rate*			86,10%	*Accuracy Rate*			82,30%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
CUR	**-1,593**	***	0,203	*NAVSH*	**-0,584**	**	0,558	*SALETAS*	**-4,577**	***	0,010
	(0,466)				(0,251)				(1,605)		
CFSH	**-6,985**	***	0,001	*DIVCOV*	**0,052**	**	1,053	*OPM*	**-3,020**	***	0,049
	(1,777)				(0,020)				(0,863)		
CGEAR	**1,374**	**	3,951	*MVBV*	**-1,345**	***	0,261	*EPS*	**-3,456**	***	0,032
	(0,583)				(0,460)				(1,065)		
Constant	-1,899	**	0,150	*NPM*	**-3,973**	***	0,019	*CFM*	**-0,604**	**	0,547
	(0,808)				(1,444)				(0,235)		
				CUR	**-0,813**	**	0,444	*CGEAR*	**-1,046**	**	0,352
					(0,361)				(0,521)		
				CFSH	**-4,198**	***	0,015	*Constant*	-0,599		0,550
					(1,236)				(0,934)		
				CGEAR	**-2,545**	***	0,078				
					(0,881)						
				CLSFU	**-3,183**	***	0,041				
					(1,049)						
				Constant	2,218	*	9,186				

					(1,138)						

4.UK

2004				**2005**				**2006**			
Dependent variable			FFS	*Dependent variable*			FFS	*Dependent variable*			FFS
Cases Included in Analysis			288	*Cases Included in Analysis*			288	*Cases Included in Analysis*			270
Missing Cases			9	*Missing Cases*			9	*Missing Cases*			27
Total			297	*Total*			297	*Total*			297
Accuracy Rate			95,50%	*Accuracy Rate*			94,80%	*Accuracy Rate*			93,00%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
SALETAS	**-3,063**	**	0,047	*SALESHA*	**0,156**	***	1,169	*NAVSH*	**-0,561**	*	0,571
	(1,429)				(0,060)				(0,301)		
ROCE	**-12,571**	***	0,000	*NPM*	**-9,383**	**	0,000	*SALETAS*	**-1,331**	*	0,264
	(4,194)				(4,100)				(0,745)		
ETL	**-0,464**	***	0,628	*EPS*	**-2,824**	*	0,059	*LNMV*	**-0,535**	***	0,586
	(0,167)				(1,524)				(0,185)		
Constant	-3,300	***	0,037	*QUI*	**1,106**	***	3,023	*MVBV*	**0,217**	**	1,242
	(1,104)				(0,307)				(0,106)		
				DEBT	**-1,628**	***	0,196	*ROSC*	**-2,962**	***	0,052
					(0,492)				(1,087)		
				ETL	**-1,271**	**	0,281	*DEBT*	**-0,763**	***	0,466
					(0,524)				(0,253)		
				Constant	-1,826	*	0,161	*IGEAR*	**-1,421**	**	0,242
					(1,000)				(0,679)		
								Constant	3,173	***	23,876
									(1,001)		

2007				**2008**				**2009**			
Dependent variable			FFS	*Dependent variable*			FFS	*Dependent variable*			FFS
Cases Included in Analysis			286	*Cases Included in Analysis*			253	*Cases Included in Analysis*			271
Missing Cases			11	*Missing Cases*			44	*Missing Cases*			26
Total			297	*Total*			297	*Total*			297
Accuracy Rate			93,00%	*Accuracy Rate*			88,10%	*Accuracy Rate*			78,60%
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
NAVSH	**-0,714**	**	0,490	NAVSH	**-0,305**	**	0,737	RESSFU	**-1,090**	***	0,336
	(0,356)				(0,148)				(0,407)		
SALETAS	**-4,462**	***	0,012	RESSFU	**-0,468**	**	0,626	LNMV	**-0,189**	*	0,828
	(1,380)				(0,207)				(0,099)		
RESSFU	**-3,257**	**	0,039	LNMV	**-0,208**	*	0,812	DIVSH	**-1,828**	*	0,161
	(1,565)				(0,119)				(1,005)		
LNMV	**-1,415**	***	0,243	OPM	**-2,870**	***	0,057	DIVYI	**-1,496**	*	0,224
	(0,418)				(0,970)				(0,788)		
NPM	**-7,298**	***	0,001	CUR	**-1,480**	***	0,228	HOLTA	**-9,799**	*	0,000
	(2,615)				(0,506)				(5,664)		
CUR	**-2,048**	*	0,129	DEBT	**-0,361**	**	0,697	OPM	**-3,667**	**	0,026

	(1,183)				(0,183)				(1,532)		
ETL	**-1,200**	***	0,301	Constant	1,955	*	7,064	CASH	**-2,643**	***	0,071
	(0,447)				(1,032)				(0,782)		
TLSFU	**-0,516**	**	0,597					STOCKT	**-0,132**	*	0,876
	(0,262)								(0,073)		
Constant	6,359	**	5,774					ETL	**-0,256**	*	0,774
	(2,486)								(0,135)		
								Constant	1,516	**	4,553
									(0,595)		
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.											

Table 4 - Jones Model

Level-2 Longitudinal analysis				
Model Dimension		**Number of Levels**	**Covariance Structure**	**Number of Parameters**
Fixed Effects	Intercept	1		1
	FFS	2		1
	Time	1		1
	FFS * Time	2		1
Random Effects	Intercept + Time	2	Unstructured	3
Repeated Effects	Time	6	First-Order Autoregressive	2
Total		14		9

	Australia	**Germany**	**Greece**	**UK**
Number of Subjects	455	404	205	297
Information critieria				
Log. Likelihood	3.503,57	876,83	2.110,03	2.578,07
Akaike's Information Criterion (AIC)	3.513,57	870,83	2.104,03	2.584,07
Hurvich and Tsai's Criterion (AICC)	3.513,59	870,82	2.104,01	2.584,09
Bozdogan's Criterion (CAIC)	3.548,07	850,46	2.085,71	2.603,52
Schwarz's Bayesian Criterion (BIC)	3.543,07	853,46	2.088,71	2.600,52

Panel A: Estimates of fixed effects[1]

Parameter	**Estimate**	**Sig.**	**Estimate**	**Sig.**	**Estimate**	**Sig.**	**Estimate**	**Sig.**
Time	**0,050**	***	**-0,038**	***	**-0,010**	**	**-0,076**	***
	(0,013)		(0,010)		(0,004)		(0,025)	
[FFS=0]	**-0,069**	*	-0,049		-0,008		-0,344	
	(0,042)		(0,030)		(0,015)		(0,100)	
[FFS=1]	0,000		0,000		0,000		0,000	
	(0,000)		(0,000)		(0,000)		(0,000)	
[FFS=0] * Time	**-0,065**	***	**0,042**	***	0,003		**0,082**	***
	(0,014)		(0,010)		(0,005)		(0,026)	
[FFS=1] * Time	0,000		0,000		0,000		0,000	

	(0,000)		(0,000)		(0,000)		(0,000)	
Intercept	**0,108**	***	0,046		0,007		**0,324**	***
	(0,039)		(0,030)		(0,013)		(0,097)	

[1]Dependent Variable: Accruals

Panel B:Pairwise Comparisons[2]

(I) FFS - (J) FFS	Mean Difference (I-J)	Sig.	Mean Difference (I-J)	Sig.	Mean Difference (I-J)	Sig.	Mean Difference (I-J)	Sig.
FFS(1) - FFS (0)	**0,232**	***	**-0,056**	***	-0,004		**0,139**	***
	(0,026)		(0,019)		(0,010)		(0,051)	

[2]Dependent Variable: Accruals

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 5 - Results of H1/Test 3

Panel A: Australia									
2005 Individual Standards	**Count**	**Mean**	**St. Deviation**	**One sample t-test for mean**	**Partial Index ≤ -0,10**	**Partial Index between -0.099 – -0,05**	**Partial Index between -0.049 - +0,049**	**Partial Index between 0.05 - 0.099**	**Partial Index ≥ 0.10**
IAS 7-Statement of Cash Flows	433(94,96%)	0,161	1,991	*	150	21	100	17	145
IAS 12-Income Taxes	400(87,72%)	-0,294	1,147	***	265	21	51	8	55
IAS 16-Property, Plant and Equipment	439(96,27%)	-0,182	2,771	*	168	29	88	16	155
IAS 18-Revenue	436(95,61%)	0,282	3,380	*	133	19	154	16	114
IAS 23-Borrowing Costs	329(72,15%)	0,052	0,517	*	62	21	142	30	74
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	443(97,15%)	0,535	6,182	*	167	10	33	12	221
IAS 33-Earnings Per Share	434(95,18%)	0,452	6,331	*	171	7	69	21	166
IAS 36-Impairment of assets	439(96,27%)	-0,168	2,111	*	110	43	187	26	73
IAS 38-Intangible assets	333(73,03%)	0,179	1,706	*	70	24	150	16	73
2006 Individual Standards									
IAS 7-Statement of Cash Flows	436(95,61%)	-0,254	3,071	*	157	17	97	27	138
IAS 12-Income Taxes	335(73,46%)	-0,133	2,040		90	21	119	23	82
IAS 16-Property, Plant and Equipment	442(96,63%)	0,190	2,548	*	128	23	118	22	165
IAS 18-Revenue	449(98,46%)	-0,310	3,260	**	142	21	187	18	81
IAS 23-Borrowing Costs	200(43,86%)	-0,025	0,250	*	26	8	131	20	15
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	432(94,74%)	0,515	5,156	**	192	10	30	10	190
IAS 33-Earnings Per Share	439(96,27%)	0,389	5,717	*	127	12	74	30	196

IAS 36-Impairment of assets	454(99,56%)	0,289	2,140	***	97	35	135	36	151
IAS 38-Intangible assets	335(73,46%)	-0,229	1,728	**	92	20	145	15	63
2007 Individual Standards									
IAS 7-Statement of Cash Flows	436(95,61%)	-0,232	2,874	*	167	19	95	19	136
IAS 12-Income Taxes	352(77,19%)	-0,339	3,675	*	109	19	126	20	78
IAS 16-Property, Plant and Equipment	442(96,93%)	0,219	3,006	*	130	19	137	16	154
IAS 18-Revenue	441(96,71%)	0,280	3,366	*	94	25	195	16	111
IAS 23-Borrowing Costs	214(46,93%)	0,043	0,350	*	28	7	129	18	32
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	438(96,05%)	0,592	6,548	*	196	10	18	7	207
IAS 33-Earnings Per Share	435(95,39%)	0,456	5,170	*	147	15	77	17	179
IAS 36-Impairment of assets	451(98,90%)	0,334	2,667	***	72	30	178	30	141
IAS 38-Intangible assets	336(73,68%)	0,215	2,422	*	87	14	135	8	92
2008 Individual Standards									
IAS 7-Statement of Cash Flows	437(95,83%)	0,201	1,957	**	126	32	112	20	147
IAS 12-Income Taxes	348(76,32%)	0,162	2,272	*	106	17	109	12	116
IAS 16-Property, Plant and Equipment	439(96,27%)	0,236	2,691	*	127	29	110	18	155
IAS 18-Revenue	443(97,15%)	0,259	2,868	*	122	16	206	18	81
IAS 23-Borrowing Costs	214(46,93%)	0,063	0,437	**	37	18	106	18	35
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	430(94,30%)	-0,362	5,733	0,192	195	9	23	6	197
IAS 33-Earnings Per Share	417(91,45%)	0,800	5,621	***	129	13	57	16	202
IAS 36-Impairment of assets	455(99,78%)	0,128	1,368	**	89	21	159	45	141
IAS 38-Intangible assets	336(73,68%)	0,299	2,561	**	65	19	145	23	84
2009 Individual Standards									
IAS 7-Statement of Cash Flows	438(96,05%)	-0,105	1,307	*	106	29	164	37	102

IAS 12-Income Taxes	341(74,78%)	-0,160	1,462	**	121	22	94	20	84
IAS 16-Property, Plant and Equipment	439(96,27%)	0,243	2,635	**	133	23	120	16	164
IAS 18-Revenue	454(99,56%)	0,370	3,233	**	76	22	204	13	139
IAS 23-Borrowing Costs	215(47,15%)	-0,050	0,349	**	32	25	127	14	17
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	432(94,74%)	0,313	3,307	**	163	9	29	15	216
IAS 33-Earnings Per Share	433(94,96%)	0,805	6,540	**	142	17	68	15	191
IAS 36-Impairment of assets	454(99,56%)	-0,043	0,500	*	86	39	268	22	39
IAS 38-Intangible assets	336(73,68%)	0,212	1,754	**	71	18	153	12	82
Panel B: Germany									
2005 Individual Standards	**Count**	**Mean**	**St. Deviation**	**One sample t-test for mean**	**Partial Index ≤ -0,10**	**Partial Index between -0.099 – -0,05**	**Partial Index between -0.049- +0,049**	**Partial Index between 0.05 – 0.099**	**Partial Index ≥ 0.10**
IAS 7-Statement of Cash Flows	381(94,31%)	-0,511	5,721	*	173	9	32	11	156
IAS 12-Income Taxes	397(98,27%)	-0,203	2,647	*	170	25	79	17	106
IAS 16-Property, Plant and Equipment	397(98,27%)	-0,523	5,058	**	172	11	51	17	146
IAS 18-Revenue	399(89,76%)	0,116	1,409	*	86	22	218	19	54
IAS 23-Borrowing Costs	353(87,38%)	-0,177	1,964	*	103	21	101	23	105
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	389(96,29%)	0,281	2,385	**	95	33	111	21	129
IAS 33-Earnings Per Share	393(87,28%)	-0,198	2,240	*	93	26	174	26	74
IAS 36-Impairment of assets	399(98,76%)	0,285	3,303	*	139	17	60	14	169
IAS 38-Intangible assets	390(96,53%)	-0,289	3,573	*	125	23	104	16	122
2006 Individual Standards									
IAS 7-Statement of Cash Flows	324(80,20%)	-0,463	4,693	*	149	8	30	10	127
IAS 12-Income Taxes	400(99,01%)	-0,288	3,188	*	171	17	60	22	130

IAS 16-Property, Plant and Equipment	394(97,52%)	-0,325	4,407	*	143	13	64	9	165
IAS 18-Revenue	401(99,26%)	0,201	2,709	*	50	17	251	16	67
IAS 23-Borrowing Costs	274(67,82%)	-0,105	1,077	*	55	14	128	20	57
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	401(99,26%)	0,319	3,758	*	157	24	73	22	125
IAS 33-Earnings Per Share	391(96,78%)	-0,282	3,241	*	101	20	144	18	108
IAS 36-Impairment of assets	400(99,01%)	-0,180	1,602	**	96	15	165	27	97
IAS 38-Intangible assets	386(95,54%)	-0,357	4,221	*	124	16	80	16	150
2007 Individual Standards									
IAS 7-Statement of Cash Flows	330(81,68%)	0,401	3,832	*	138	7	29	15	141
IAS 12-Income Taxes	402(99,50%)	-0,427	4,270	**	171	14	65	9	143
IAS 16-Property, Plant and Equipment	403(99,75%)	-0,448	4,822	*	172	15	54	12	150
IAS 18-Revenue	403(99,75%)	-0,078	0,908	*	64	20	265	14	40
IAS 23-Borrowing Costs	287(74,04%)	0,145	1,235	**	46	28	143	17	53
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	403(99,75%)	0,166	2,112	*	110	34	123	25	111
IAS 33-Earnings Per Share	392(97,03%)	-0,215	2,350	*	94	25	145	26	102
IAS 36-Impairment of assets	403(99,75%)	0,153	1,868	*	90	14	183	21	95
IAS 38-Intangible assets	389(96,29%)	0,666	5,582	**	126	25	71	18	149
2008 Individual Standards									
IAS 7-Statement of Cash Flows	328(81,19%)	0,327	3,541	*	134	10	39	3	142
IAS 12-Income Taxes	400(99,01%)	-0,199	2,401	*	191	15	77	17	100
IAS 16-Property, Plant and Equipment	400(99,01%)	-0,240	3,266	*	145	15	57	6	177
IAS 18-Revenue	401(99,26%)	0,054	0,711	*	60	23	252	14	52
IAS 23-Borrowing Costs	291(72,03%)	0,041	0,211	***	33	18	151	26	63

IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	400(99,01%)	0,063	0,757	*	90	38	150	28	94
IAS 33-Earnings Per Share	397(98,27%)	-0,142	1,481	*	81	28	208	21	59
IAS 36-Impairment of assets	402(99,50%)	0,097	0,836	**	60	18	289	17	18
IAS 38-Intangible assets	392(97,03%)	0,248	2,752	*	127	19	94	16	136
2009 Individual Standards									
IAS 7-Statement of Cash Flows	328(81,19%)	0,436	3,325	**	94	11	48	12	163
IAS 12-Income Taxes	401(99,26%)	-0,206	2,489	*	162	30	106	17	86
IAS 16-Property, Plant and Equipment	395(97,77%)	-0,209	2,705	*	115	19	92	17	152
IAS 18-Revenue	403(99,75%)	-0,029	0,290	**	50	22	264	22	45
IAS 23-Borrowing Costs	292(72,28%)	0,082	0,826	*	85	16	106	16	69
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	402(99,50%)	-0,123	1,391	*	77	27	163	50	85
IAS 33-Earnings Per Share	394(97,52%)	-0,064	0,804	*	79	33	207	19	56
IAS 36-Impairment of assets	402(99,50%)	0,099	1,166	*	90	9	143	23	137
IAS 38-Intangible assets	391(96,78%)	-0,205	2,960	*	121	16	90	19	145
Panel C: Greece									
2005 Individual Standards	**Count**	**Mean**	**St. Deviation**	**One sample t-test for mean**	**Partial Index ≤ -0,10**	**Partial Index between -0.099 – -0,05**	**Partial Index between -0.049 – +0,049**	**Partial Index between +0.05 – 0.099**	**Partial Index ≥ 0.10**
IAS 7-Statement of Cash Flows	202(98,54%)	0,607	4,387	*	84	6	20	2	90
IAS 12-Income Taxes	200(97,56%)	0,315	2,248	**	79	8	40	7	66
IAS 16-Property, Plant and Equipment	202(98,54%)	-0,462	3,431	*	73	8	27	9	85
IAS 18-Revenue	202(98,54%)	0,235	1,650	**	43	9	72	18	60
IAS 23-Borrowing Costs	199(97,07%)	0,218	1,669	*	77	6	24	9	83

IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	200(97,56%)	0,345	2,029	**	88	5	13	6	88
IAS 33-Earnings Per Share	202(98,54%)	-0,256	1,669	**	52	10	93	10	37
IAS 36-Impairment of assets	198(96,59%)	0,345	2,614	*	67	6	8	2	115
IAS 38-Intangible assets	168(81,95%)	0,552	3,654	*	58	6	35	8	61
2006 Individual Standards									
IAS 7-Statement of Cash Flows	166(80,98%)	-0,174	1,280	*	32	7	80	9	38
IAS 12-Income Taxes	199(97,07%)	-0,051	0,451	*	46	18	82	16	37
IAS 16-Property, Plant and Equipment	204(99,51%)	-0,074	0,615	*	35	15	83	25	46
IAS 18-Revenue	203(99,02%)	-0,098	0,721	*	35	16	129	6	17
IAS 23-Borrowing Costs	140(68,29%)	0,430	2,181	**	36	6	41	4	53
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	205 (100%)	0,182	1,256	**	44	6	44	15	96
IAS 33-Earnings Per Share	203(99,02%)	0,038	0,339	*	30	12	116	10	35
IAS 36-Impairment of assets	160(78,05%)	0,058	0,433	*	30	14	64	11	41
IAS 38-Intangible assets	171(83,41%)	-0,073	0,435	**	25	8	103	12	23
2007 Individual Standards									
IAS 7-Statement of Cash Flows	164 (80,00%	-0,357	2,237	**	85	16	20	3	40
IAS 12-Income Taxes	198(96,59%)	-0,098	0,757	*	49	11	75	21	42
IAS 16-Property, Plant and Equipment	202(98,54%)	-0,172	1,503	*	75	12	29	11	75
IAS 18-Revenue	202(98,54%)	0,215	1,743	*	57	14	81	12	38
IAS 23-Borrowing Costs	141(68,78%)	0,118	0,881	*	32	16	53	10	30
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	202(98,54%)	0,374	2,181	**	46	7	13	8	128

IAS 33-Earnings Per Share	204(99,51%)	-0,023	0,177	*	19	7	157	7	14
IAS 36-Impairment of assets	160(78,05%)	0,095	0,497	**	26	8	52	24	50
IAS 38-Intangible assets	177(86,34%)	-0,118	0,778	**	41	11	93	6	26
2008 Individual Standards									
IAS 7-Statement of Cash Flows	165(80,49%)	-0,201	1,547	*	63	9	33	9	51
IAS 12-Income Taxes	199(97,07%)	-0,307	2,296	*	77	9	36	5	72
IAS 16-Property, Plant and Equipment	202(98,54%)	0,244	1,766	*	64	13	68	9	48
IAS 18-Revenue	201(98,05%)	0,251	1,119	***	29	7	89	23	53
IAS 23-Borrowing Costs	140(68,29%)	0,259	1,654	*	51	11	36	2	40
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	204(99,51%)	-0,076	0,665	*	42	11	90	10	51
IAS 33-Earnings Per Share	205(100,00%)	0,041	0,220	***	8	10	159	11	17
IAS 36-Impairment of assets	161(78,54%)	0,172	1,246	*	44	15	42	15	45
IAS 38-Intangible assets	180(87,80%)	0,259	2,069	*	42	10	79	12	37
2009 Individual Standards									
IAS 7-Statement of Cash Flows	162(79,02%)	0,552	3,722	*	67	5	19	3	68
IAS 12-Income Taxes	198(96,59%)	-0,220	1,765	*	95	11	22	6	64
IAS 16-Property, Plant and Equipment	198(96,59%)	-0,238	1,811	*	71	8	39	8	72
IAS 18-Revenue	203(99,02%)	0,110	0,878	*	59	10	69	10	55
IAS 23-Borrowing Costs	138(67,32%)	-0,163	1,079	*	45	3	35	8	47
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	199(97,07%)	-0,825	5,695	**	85	7	5	2	100
IAS 33-Earnings Per Share	203(99,02%)	-0,097	0,623	**	28	8	129	13	25
IAS 36-Impairment of assets	157(76,59%)	-0,190	1,289	*	56	9	39	10	43
IAS 38-Intangible assets	179(87,32%)	-0,348	2,607	*	49	6	78	8	38
Panel D: UK									

2005 Individual Standards	**Count**	**Mean**	**St. Deviation**	**One sample t-test for mean**	**Partial Index ≤ -0,10**	**Partial Index between -0.099 – -0,05**	**Partial Index between -0.049 – +0,049**	**Partial Index between +0.05 – 0.099**	**Partial Index ≥ 0.10**
IAS 7-Statement of Cash Flows	280(94,28%)	-0,592	4,605	**	162	12	23	7	76
IAS 12-Income Taxes	294(98,99%)	-0,303	2,896	*	187	12	32	39	24
IAS 16-Property, Plant and Equipment	295(99,33%)	0,608	4,818	**	77	6	34	15	163
IAS 18-Revenue	296(99,66%)	-0,087	0,899	*	30	12	229	5	20
IAS 23-Borrowing Costs	292(98,32%)	-0,361	3,311	*	120	11	62	9	90
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	282(94,95%)	0,077	0,666	*	84	24	60	21	93
IAS 33-Earnings Per Share	285(95,96%)	0,233	2,252	*	66	19	122	21	57
IAS 36-Impairment of assets	292(98,32%)	-0,260	1,884	**	144	18	48	12	70
IAS 38-Intangible assets	294 (98,99%)	-0,530	3,374	***	132	12	72	9	69
2006 Individual Standards									
IAS 7-Statement of Cash Flows	294(98,99%)	0,349	2,998	**	103	2	68	7	114
IAS 12-Income Taxes	293(98,65%)	-0,265	2,746	*	103	14	69	11	96
IAS 16-Property, Plant and Equipment	295(99,33%)	-0,229	2,312	*	59	16	94	25	101
IAS 18-Revenue	297(100,00%)	0,007	0,065	*	6	6	270	5	10
IAS 23-Borrowing Costs	293(98,65%)	-0,137	1,337	*	70	15	126	12	70
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	294(98,99%)	0,057	0,609	*	66	26	124	25	53
IAS 33-Earnings Per Share	289(97,31%)	-0,174	1,278	**	59	14	153	13	50
IAS 36-Impairment of assets	295(99,33%)	0,035	0,345	*	46	21	145	26	57
IAS 38-Intangible assets	295(99,33%)	-0,186	1,533	**	105	18	92	13	67
2007 Individual Standards									
IAS 7-Statement of Cash Flows	290(97,64%)	-0,325	2,971	*	103	11	70	10	96

IAS 12-Income Taxes	293(98,65%)	-0,303	2,092	**	123	13	63	11	83
IAS 16-Property, Plant and Equipment	294(98,99%)	0,330	2,274	**	75	13	78	16	112
IAS 18-Revenue	297(100,00%)	0,049	0,465	*	15	2	251	9	20
IAS 23-Borrowing Costs	295(99,33%)	0,247	2,271	*	64	19	121	12	79
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	294(98,99%)	0,236	2,220	*	80	27	103	18	66
IAS 33-Earnings Per Share	289(97,31%)	-0,086	0,675	**	51	19	173	12	34
IAS 36-Impairment of assets	294(98,99%)	0,152	1,150	**	62	19	134	22	57
IAS 38-Intangible assets	290(97,64%)	0,319	2,898	*	89	19	83	4	95
2008 Individual Standards									
IAS 7-Statement of Cash Flows	287(96,63%)	0,521	4,860	*	108	9	63	7	100
IAS 12-Income Taxes	294(98,99%)	0,178	1,784	*	120	11	77	7	79
IAS 16-Property, Plant and Equipment	290(97,64%)	-0,600	5,800	*	119	10	48	5	108
IAS 18-Revenue	296(99,66%)	0,054	0,562	*	10	13	251	7	15
IAS 23-Borrowing Costs	294(98,99%)	0,253	2,465	*	67	10	130	22	65
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	292(98,32%)	0,249	2,500	*	77	24	73	21	97
IAS 33-Earnings Per Share	291(97,98%)	0,408	2,797	**	33	16	174	19	49
IAS 36-Impairment of assets	294(98,99%)	-0,142	1,342	*	67	20	125	19	63
IAS 38-Intangible assets	293(98,65%)	0,271	2,591	*	91	13	87	14	88
2009 Individual Standards									
IAS 7-Statement of Cash Flows	296(99,66%)	0,334	3,360	*	92	9	73	11	111
IAS 12-Income Taxes	296(99,66%)	-0,117	1,075	*	112	22	81	18	63
IAS 16-Property, Plant and Equipment	296(99,66%)	-0,331	3,321	*	74	14	122	11	75
IAS 18-Revenue	296(99,66%)	-0,029	0,300	*	16	10	248	9	13
IAS 23-Borrowing	297(100,00%	-0,162	1,587	*	72	27	124	12	62

Costs	)								
IAS 32-Financial instruments: disclosure and presentation, IAS 39-Financial instruments: recognition and measurement	294(98,99%)	-0,158	1,626	*	62	25	101	35	71
IAS 33-Earnings Per Share	292(98,32%)	0,053	0,504	*	30	12	219	5	26
IAS 36-Impairment of assets	297(100,00%)	-0,244	2,270	*	70	7	98	25	97
IAS 38-Intangible assets	297(100,00%)	0,158	1,516	*	49	11	165	12	60
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.									

Table 6 - Auditors' size and rotation

H1 Test 4a :OLS Regression of Accruals on Firm Financial Measures

Panel A (DV=1 for Big-4 Auditors, DV=0 otherwise)

1. Australia

2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,071**	***	DV	**0,059**	**	DV	**-0,102**	***
	(0,018)			(0,026)			(0,029)	
SALETAS	**0,032**	***	SALETAS	0,040	***	SALETAS	**0,039**	**
	(0,010)			(0,012)			(0,015)	
OPM	**0,045**	***	OPM	**0,007**	***	EPS	**0,041**	**
	(0,003)			(0,001)			(0,020)	
DEBTE	**-0,252**	***	DEBTE	**0,003**	*	DSFU	**-0,212**	***
	(0,043)			(0,002)			(0,044)	
Constant	-0,005		Constant	0,002		Constant	0,001	
	(0,006)			(0,008)			(0,009)	
R^2 adj.	0,966		R^2 adj.	0,994		R^2 adj.	0,991	
Sample size	443		Sample size	445		Sample size	441	

2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,065**	***	DV	**0,085**	***	DV	0,045	
	(0,016)			(0,027)			(0,061)	
SALETAS	**0,038**	***	LNMV	**-0,009**	**	LNMV	**-0,039**	***
	(0,007)			(0,004)			(0,009)	
OPM	**0,001**	***	EPS	**0,012**	*	EPS	**0,335**	***
	(0,000)			(0,007)			(0,048)	
DEBTE	**-0,037**	***	DEBTE	**-0,067**	*	DEBTE	**-0,534**	***
	(0,014)			(0,035)			(0,085)	
Constant	-0,007		Constant	0,001		Constant	0,024	
	(0,005)			(0,009)			(0,017)	
R^2 adj.	0,614		R^2 adj.	0,734		R^2 adj.	0,828	
Sample size	455		Sample size	452		Sample size	443	

2. Germany

2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,066**	*	DV	**-0,034**	***	DV	**0,038**	*

	(0,040)			(0,011)			(0,021)	
RESSFU	**-0,069**	*	SALETAS	**0,012**	***	SALETAS	**0,036**	***
	(0,039)			(0,005)			(0,010)	
NPM	**0,200**	*	NPM	**-0,069**	***	NPM	**-0,383**	***
	(0,105)			(0,006)			(0,054)	
DEBTE	**0,018**	***	DSFU	**0,012**	***	DSFU	**0,018**	***
	(0,006)			(0,003)			(0,004)	
Constant	0,009		Constant	0,002		Constant	0,007	
	(0,007)			(0,003)			(0,005)	
R^2 adj.	0,528		R^2 adj.	0,917		R^2 adj.	0,918	
Sample size	369		Sample size	378		Sample size	371	
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,045**	*	DV	**0,016**	**	DV	**-0,079**	***
	(0,025)			(0,008)			(0,020)	
LNMV	**0,008**	**	SALETAS	**0,012**	***	SALETAS	**0,045**	***
	(0,004)			(0,004)			(0,006)	
NPM	**-0,330**	***	OPM	**0,037**	***	EPS	**0,004**	**
	(0,069)			(0,008)			(0,002)	
DEBT	**0,006**	***	IGEAR	**0,001**	*	IGEAR	**0,004**	*
	(0,002)			(0,001)			(0,002)	
Constant	0,012		Constant	0,008		Constant	0,008	
	(0,005)			(0,002)			(0,006)	
R^2 adj.	0,59		R^2 adj.	0,863		R^2 adj.	0,619	
Sample size	368		Sample size	370		Sample size	370	
3. Greece								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,025**	***	DV	**-0,042**	*	DV	**-0,109**	**
	(0,009)			(0,029)			(0,051)	
RESSFU	**-0,252**	***	SALETAS	**0,019**	*	SALETAS	**0,049**	***
	(0,052)			(0,010)			(0,010)	
EPS	**0,012**	***	EPS	**0,098**	***	NPM	**-0,043**	***
	(0,003)			(0,021)			(0,007)	
IGEAR	**0,002**	***	DEBTE	**-0,027**	**	IGEAR	**0,010**	***
	(0,000)			(0,012)			(0,004)	
Constant	0,001		Constant	0,001		Constant	0,001	
	(0,000)			(0,002)			(0,002)	
R^2 adj.	0,795		R^2 adj.	0,784		R^2 adj.	0,691	
Sample size	205		Sample size	203		Sample size	204	
2007			**2008**			**2009**		

Variables	Coefficients	Sig.	Variables	Coefficients	Sig.	Variables	Coefficients	Sig.
DV	**-0,415**	***	DV	**0,176**	***	DV	**0,147**	***
	(0,073)			(0,061)			(0,039)	
SALETAS	**0,050**	**	SALETAS	**0,033**	**	SALETAS	**-0,138**	***
	(0,020)			(0,014)			(0,016)	
NPM	**-0,137**	*	OPM	**0,161**	**	NPM	**-0,089**	***
	(0,075)			(0,063)			(0,014)	
DEBTE	**-0,049**	***	DEBT	**0,007**	**	IGEAR	**0,008**	***
	(0,015)			(0,003)			(0,002)	
Constant	0,003		Constant	0,003		Constant	0,002	
	(0,002)			(0,002)			(0,001)	
R^2 adj.	0,642		R^2 adj.	0,695		R^2 adj.	0,964	
Sample size	204		Sample size	203		Sample size	201	

4.UK

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,183**	***	DV	**-0,245**	***	DV	**-0,071**	*
	(0,029)			(0,048)			(0,044)	
LNMV	**0,027**	***	LNMV	**0,033**	***	LNMV	**0,011**	**
	(0,003)			(0,007)			(0,006)	
NPM	**-0,157**	***	NPM	**-0,343**	***	NPM	**-0,043**	***
	(0,020)			(0,060)			(0,007)	
CLSFU	**-0,015**	**	CLSFU	**-0,022**	***	CLSFU	**0,012**	**
	(0,006)			(0,007)			(0,006)	
Constant	0,023		Constant	0,023		Constant	0,018	
	(0,011)			(0,020)			(0,017)	
R^2 adj.	0,745		R^2 adj.	0,582		R^2 adj.	0,705	
Sample size	279		Sample size	276		Sample size	275	
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,177**	***	DV	**-0,054**	*	DV	**0,044**	**
	(0,039)			(0,034)			(0,017)	
SALETAS	**0,020**	***	LNMV	**0,010**	**	LNMV	**-0,005**	**
	(0,006)			(0,004)			(0,002)	
NPM	**-0,068**	***	NPM	**-0,092**	***	EPS	**0,027**	**
	(0,020)			(0,027)			(0,011)	
CLSFU	**-0,013**	**	ETL	**0,007**	*	IGEAR	**-0,002**	*
	(0,006)			(0,004)			(0,002)	
Constant	0,011		Constant	0,024		Constant	0,003	
	(0,016)			(0,016)			(0,007)	
R^2 adj.	0,604		R^2 adj.	0,730		R^2 adj.	0,670	

Sample size	274		Sample size	268		Sample size	260	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

H1 Test 4b :OLS Regression of Accruals on Firm Financial Measures

Panel B (DV=1 for Auditors Change, DV=0 otherwise)

1. Australia

2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,175**	***	DV	**0,350**	***	DV	**-0,055**	**
	(0,040)			(0,019)			(0,023)	
LNMV	**0,023**	***	LNMV	**-0,012**	***	LNMV	**-0,016**	***
	(0,006)			(0,004)			(0,003)	
NPM	**-0,104**	***	NPM	**-0,257**	***	NPM	**-0,006**	***
	(0,004)			(0,016)			(0,001)	
DEBT	**-0,007**	***	DEBTE	**0,095**	***	DEBT	**0,001**	**
	(0,001)			(0,016)			(0,000)	
Constant	0,006		Constant	0,003		Constant	0,004	
	(0,001)			(0,001)			(0,002)	
R^2 adj.	0,882		R^2 adj.	0,870		R^2 adj.	0,900	
Sample size	455		Sample size	455		Sample size	456	

2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,143**	***	DV	**0,183**	**	DV	**-0,048**	***
	(0,030)			(0,072)			(0,018)	
LNMV	**0,034**	***	LNMV	**0,031**	**	LNMV	**-0,024**	***
	(0,005)			(0,012)			(0,003)	
NPM	**-0,027**	***	NPM	**0,003**	***	NPM	**-0,005**	***
	(0,001)			(0,001)			(0,001)	
DEBT	**-0,027**	***	DEBT	**0,012**	***	DEBT	**0,004**	***
	(0,003)			(0,002)			(0,001)	
Constant	0,001		Constant	0,002		Constant	0,002	
	(0,002)			(0,004)			(0,001)	
R^2 adj.	0,900		R^2 adj.	0,972		R^2 adj.	0,981	
Sample size	454		Sample size	456		Sample size	455	

2. Germany

2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,246**	***	DV	**0,272**	***	DV	**-0,215**	***
	(0,017)			(0,015)			(0,033)	
LNMV	**-0,021**	***	LNMV	**-0,028**	***	LNMV	**0,049**	***
	(0,002)			(0,002)			(0,005)	

NPM	**-0,200**	***	NPM	**0,582**	***	EPS	**-0,027**	***
	(0,052)			(0,052)			(0,005)	
TLSFU	**-0,011**	*	TLSFU	**0,068**	***	TLSFU	**0,052**	**
	(0,007)			(0,019)			(0,023)	
Constant	0,002		Constant	0,001		Constant	0,002	
	(0,001)			(0,000)			(0,001)	
R^2 adj.	0,985		R^2 adj.	0,996		R^2 adj.	0,971	
Sample size	402		Sample size	402		Sample size	402	
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,176**	***	DV	**0,254**	***	DV	**-0,304**	***
	(0,011)			(0,021)			(0,044)	
LNMV	**0,015**	***	SALETAS	**-0,080**	***	LNMV	**0,025**	***
	(0,002)			(0,017)			(0,006)	
NPM	**-0,062**	***	NPM	**-0,255**	***	NPM	**0,006**	***
	(0,012)			(0,059)			(0,001)	
TLSFU	**0,137**	***	DSFU	**-0,108**	***	TLSFU	**0,129**	***
	(0,009)			(0,041)			(0,032)	
Constant	0,002		Constant	0,002		Constant	0,003	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,974		R^2 adj.	0,970		R^2 adj.	0,880	
Sample size	404		Sample size	402		Sample size	403	
3. Greece								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,018**	***	DV	**0,307**	***	DV	-0,380	
	(0,005)			(0,026)			(0,055)	
SALETAS	**0,005**	**	SALETAS	**0,225**	***	RESTAS	**0,025**	***
	(0,002)			(0,018)			(0,036)	
EPS	**0,010**	**	EPS	**-0,492**	***	PLOWB	**-0,008**	***
	(0,004)			(0,041)			(0,002)	
CLSFU	**-0,021**	***	CLSFU	**-0,167**	***	CLSFU	**0,057**	***
	(0,003)			(0,014)			(0,009)	
Constant	0,001		Constant	0,002		Constant	0,002	
	(0,000)			(0,001)			(0,001)	
R^2 adj.	0,920		R^2 adj.	0,900		R^2 adj.	0,904	
Sample size	204		Sample size	205		Sample size	204	
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	-0,273		DV	0,093		DV	-0,034	
	(0,040)			(0,017)			(0,006)	

SALETAS	**0,018**	***	SALESHA	**-0,003**	***	SALETAS	**-0,014**	***
	(0,002)			(0,001)			(0,002)	
PLOWB	**0,004**	***	PLOWB	**-0,001**	***	PLOWB	**0,002**	***
	(0,001)			(0,000)			(0,001)	
CLSFU	**0,020**	***	DSFU	**0,065**	***	DSFU	**0,025**	***
	(0,004)			(0,012)			(0,004)	
Constant	0,002		Constant	0,002		Constant	0,002	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,889		R^2 adj.	0,793		R^2 adj.	0,864	
Sample size	204		Sample size	205		Sample size	203	

4.UK

2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,177**	***	DV	**0,124**	***	DV	**-0,089**	***
	(0,016)			(0,008)			(0,017)	
LNMV	**-0,012**	***	SALETAS	**-0,014**	***	SALESHA	**-0,012**	***
	(0,002)			(0,004)			(0,002)	
OPM	**0,202**	***	OPM	**-0,017**	**	OPM	**0,029**	***
	(0,014)			(0,007)			(0,003)	
CLSFU	**-0,032**	***	DEBT	**-0,02**	***	CLSFU	**0,075**	***
	(0,008)			(0,002)			(0,007)	
Constant	0,002		Constant	0,002		Constant	0,002	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,892		R^2 adj.	0,734		R^2 adj.	0,893	
Sample size	297		Sample size	297		Sample size	297	
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,484**	***	DV	**-0,043**	***	DV	**-0,243**	***
	(0,026)			(0,014)			(0,011)	
LNMV	**0,040**	***	LNMV	**0,043**	***	LNMV	**0,014**	***
	(0,003)			(0,002)			(0,001)	
OPM	**0,081**	***	OPM	**-0,500**	***	OPM	**0,291**	***
	(0,009)			(0,039)			(0,021)	
DEBT	**-0,038**	***	DEBT	**-0,043**	***	TLSFU	**0,042**	***
	(0,005)			(0,003)			(0,006)	
Constant	0,002		Constant	0,002		Constant	0,002	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,812		R^2 adj.	0,902		R^2 adj.	0,946	
Sample size	297		Sample size	297		Sample size	297	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 7 - H2/Test 1 Results

Panel A:Austalia							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			872	*Cases Included in Analysis*			907
Missing Cases			40	*Missing Cases*			5
Total			912	*Total*			912
Test 1a: *Logistic Regression*							
Accuracy Rate			51,50%	*Accuracy Rate*			50,30%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HBVALUE	**0,468**	**	1,597	HBVALUE	**0,336**	*	1,399
	(0,234)				(0,204)		
LBVALUE	**0,241**	*	1,273	LBVALUE	**-0,268**	*	0,765
	(0,145)				(0,148)		
Test 1b: *Logistic Regression*							
Accuracy Rate			51,30%	*Accuracy Rate*			50,30%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HSVALUE	**0,454**	*	1,575	HSVALUE	**0,438**	**	1,549
	(0,251)				(0,210)		
LSVALUE	**-0,284**	*	0,753	LSVALUE	**0,287**	*	1,332
	(0,176)				(0,175)		
Test 1c: *Logistic Regression*							
Accuracy Rate			51,60%	*Accuracy Rate*			50,30%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
BID	**0,700**	**	1,072	BID	**No sig. results**		
	(0,032)						
SID	**No sig. results**			SID	**0,128**	*	1,137
					(0,070)		
Panel B:Germany							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			759	*Cases Included in Analysis*			755
Missing Cases			49	*Missing Cases*			53
Total			808	*Total*			808

Test 1a: *Logistic Regression*							
Accuracy Rate			51%	*Accuracy Rate*			51,70%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HBVALUE	**1,329**	***	3,778	HBVALUE	**-0,484**	*	0,616
	(0,359)				(0,283)		
LBVALUE	**0,430**	**	1,538	LBVALUE	**0,299**	*	1,348
	(0,175)				(0,161)		
Test 1b: *Logistic Regression*							
Accuracy Rate			51,00%	*Accuracy Rate*			51,80%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HSVALUE	**1,034**	***	2,811	HSVALUE	**-0,373**	*	0,689
	(0,239)				(0,207)		
LSVALUE	**0,718**	***	2,05	LSVALUE	**-0,340**	*	0,712
	(0,190)				(0,182)		
Test 1c: *Logistic Regression*							
Accuracy Rate			51%	*Accuracy Rate*			51,80%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
BID	**0,187**	***	1,205	BID	**No sig. Results**		
	(0,060)						
SID	**0,248**	***	1,281	SID	**-0,069**	*	0,934
	(0,066)				(0,041)		
Panel C:Greece							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			384	*Cases Included in Analysis*			397
Missing Cases			26	*Missing Cases*			13
Total			410	*Total*			410
Test 1a: *Logistic Regression*							
Accuracy Rate			51%	*Accuracy Rate*			50,40%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HBVALUE	**1,411**	**	4,101	HBVALUE	**0,848**	**	2,335
	(0,549)				(0,322)		
LBVALUE	**1,518**	***	4,564	LBVALUE	**0,402**	*	1,495
	(0,377)				(0,235)		
Test 1b: *Logistic Regression*							
Accuracy *Rate*			51,00%	*Accuracy Rate*			50,40%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**

HSVALUE	**1,018**	**	2,769	HSVALUE	**1,163**	***	3,2
	(0,455)				(0,296)		
LSVALUE	**1,865**	***	6,455	LSVALUE	**0,623**	**	1,864
	(0,461)				(0,254)		
Test 1c: *Logistic Regression*							
Accuracy Rate			51%	*Accuracy Rate*			50,40%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
BID	**0,610**	***	1,841	BID	**0,161**	*	1,175
	(0,204)				(0,087)		
SID	**0,422**	**	1,525	SID	**0,161**	**	1,175
	(0,193)				(0,079)		
Panel D:UK							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			558	*Cases Included in Analysis*			569
Missing Cases			36	*Missing Cases*			25
Total			594	*Total*			594
Test 1a: *Logistic Regression*							
Accuracy Rate			50,50%	*Accuracy Rate*			51,50%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HBVALUE	**1,268**	***	3,553	HBVALUE	**-0,895**	**	0,409
	(0,478)				(0,430)		
LBVALUE	**-0,325**	*	0,722	LBVALUE	**0,586**	***	1,797
	(0,194)				(0,177)		
Test 1b: *Logistic Regression*							
Accuracy Rate			50,50%	*Accuracy Rate*			51,00%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
HSVALUE	**0,429**	*	1,536	HSVALUE	**0,339**	*	1,403
	(0,261)				(0,209)		
LSVALUE	**0,405**	*	1,499	LSVALUE	**-0,347**	*	0,707
	(0,215)				(0,203)		
Test 1c: *Logistic Regression*							
Accuracy Rate			50,70%	*Accuracy Rate*			51,50%
2004-2005				**2005-2006**			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
BID	**-0,094**	*	0,911	BID	**0,093**	**	1,098
	(0,055)				(0,043)		
SID	**0,118**	**	1,125	SID	**0,123**	***	1,131
	(0,055)				(0,036)		

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 8 - H2 Test 2:OLS Regression of Accruals on Firm Financial Measures

Panel A. Australia

Test 2a:Insider trading vs Not

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,199**	**	DV	**0,121**	*	DV	**0,232**	**
	(0,100)			(0,064)			(0,101)	
SALETAS	**-0,002**	***	LNMV	**0,022**	**	RESTAS	**0,119**	*
	(0,001)			(0,011)			(0,071)	
OPM	**0,120**	***	OPM	**0,004**	***	OPM	**0,032**	***
	(0,022)			(0,001)			(0,001)	
DEBT	**0,002**	***	TLSFU	**1,296**	***	ETL	**-0,004**	*
	(0,000)			(0,066)			(0,002)	
Constant	0,360		Constant	0,077		Constant	0,027	
	(0,048)			(0,038)			(0,006)	
R^2 adj.	0,460		R^2 adj.	0,923		R^2 adj.	0,766	
Sample size	441		Sample size	448		Sample size	456	

Test 2b:Large vs Small Purchases

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,059**	*	DV	**0,134**	***	DV	**0,111**	***
	(0,033)			(0,019)			(0,011)	
LNMV	**0,007**	**	LNMV	**-0,011**	***	LNMV	**-0,003**	**
	(0,003)			(0,003)			(0,002)	
OPM	**0,131**	***	OPM	**-0,003**	***	ROSC	**0,052**	***
	(0,007)			(0,000)			(0,021)	
CGEAR	**-0,157**	**	CGEAR	**0,039**	***	DSFU	**0,203**	**
	(0,073)			(0,010)			(0,203)	
Constant	0,007		Constant	0,003		Constant	0,006	
	(0,002)			(0,002)			(0,002)	
R^2 adj.	0,972		R^2 adj.	0,869		R^2 adj.	0,739	
Sample size	264		Sample size	293		Sample size	309	

Test 2c:Large vs Small Disposal

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,133**	***	DV	**0,176**	***	DV	**0,071**	***

	(0,046)			(0,033)			(0,025)	
LNMV	**0,024**	***	LNMV	**-0,012**	**	SALETAS	**0,036**	***
	(0,008)			(0,005)			(0,009)	
EPS	**0,283**	**	OPM	**0,011**	*	OPM	**0,071**	***
	(0,112)			(0,007)			(0,018)	
DEBT	**-0,002**	***	DEBTE	**-1,150**	**	DSFU	**0,197**	*
	(0,001)			(0,557)			(0,123)	
Constant	0,006		Constant	0,037		Constant	0,038	
	(0,005)			(0,005)			(0,007)	
R^2 adj.	0,905		R^2 adj.	0,801		R^2 adj.	0,783	
Sample size	133		Sample size	126		Sample size	151	
Test 2d:Large vs Small Number of Insiders								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,040**	*	DV	**0,084**	***	DV	**0,184**	***
	(0,021)			(0,015)			(0,016)	
SALESHA	**-0,009**	***	SALESHA	**-0,004**	**	SALESHA	**-0,005**	**
	(0,004)			(0,001)			(0,002)	
OPM	**0,038**	***	OPM	**0,004**	***	OPM	**0,027**	***
	(0,004)			(0,000)			(0,001)	
IGEAR	**-0,028**	*	CGEAR	**0,057**	***	TLSFU	**-0,155**	**
	(0,020)			(0,011)			(0,078)	
Constant	0,023	**	Constant	0,029		Constant	0,038	
	(0,012)			(0,002)			(0,002)	
R^2 adj.	0,449		R^2 adj.	0,897		R^2 adj.	0,937	
Sample size	425		Sample size	453		Sample size	456	
Panel B. Germany								
Test 2a:Insider trading vs Not								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,034**	**	DV	**-0,046**	***	DV	**-0,059**	**
	(0,016)			(0,017)			(0,026)	
SALETAS	**-0,014**	**	RESSFU	**0,183**	***	RESTAS	**0,049**	***
	(0,007)			(0,051)			(0,014)	
OPM	**0,145**	***	EPS	**-0,008**	***	OPM	**0,086**	
	(0,028)			(0,001)			(0,036)	
CLSFU	**-0,011**	**	CLSFU	**-0,052**	***	TLSFU	**0,081**	***
	(0,005)			(0,012)			(0,018)	
Constant	0,003		Constant	0,027		Constant	0,004	
	(0,001)			(0,009)			(0,002)	
R^2 adj.	0,479		R^2 adj.	0,777		R^2 adj.	0,900	

Sample size	392		Sample size	395		Sample size	456	
Test 2b:Large vs Small Purchases								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-1,004**	***	DV	**-0,041**	*	DV	**-0,075**	**
	(0,239)			(0,022)			(0,029)	
SALESHA	**0,017**	***	SALESHA	**0,006**	**	SALETAS	**0,019**	**
	(0,006)			(0,002)			(0,010)	
OPM	**4,711**	***	EPS	**0,007**	***	EPS	**0,047**	***
	(0,807)			(0,002)			(0,014)	
DEBT	**0,034**	***	DEBT	**-0,007**	***	DEBT	**0,008**	**
	(0,034)			(0,002)			(0,003)	
Constant	0,019		Constant	0,028		Constant	0,011	
	(0,002)			(0,003)			(0,002)	
R^2 adj.	0,723		R^2 adj.	0,848		R^2 adj.	0,629	
Sample size	105		Sample size	158		Sample size	161	
Test 2c:Large vs Small Disposal								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,113**	*	DV	**-0,052**	*	DV	**0,099**	***
	(0,065)			(0,032)			(0,037)	
LNMV	**-0,024**	***	LNMV	**0,010**	***	LNMV	**0,008**	*
	(0,007)			(0,004)			(0,004)	
EPS	**0,015**	***	EPS	**0,005**	**	OPM	**0,263**	***
	(0,004)			(0,002)			(0,030)	
CGEAR	**-0,064**	***	CLSFU	**0,022**	***	TLSFU	**0,054**	*
	-(0,064)			(0,006)			(0,030)	
Constant	0,008		Constant	0,008		Constant	0,022	
	(0,005)			(0,004)			(0,005)	
R^2 adj.	0,942		R^2 adj.	0,856		R^2 adj.	0,900	
Sample size	107		Sample size	172		Sample size	456	
Test 2d:Large vs Small Number of Insiders								
2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,271**	***	DV	**-0,036**	**	DV	**0,016**	*
	(0,008)			(0,020)			(0,009)	
LNMV	**0,017**	***	LNMV	**0,004**	*	LNMV	**0,002**	**
	(0,001)			(0,002)			(0,001)	
OPM	**-0,325**	***	OPM	**0,004**	***	EPS	**0,003**	**
	(0,035)			(0,001)			(0,002)	
TLSFU	**0,067**	***	DSFU	**0,031**	***	TLSFU	**0,031**	***
	(0,003)			(0,009)			(0,006)	

Constant	0,003		Constant	0,006		Constant	0,006	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,970		R^2 adj.	0,564		R^2 adj.	0,762	
Sample size	401		Sample size	403		Sample size	400	

Panel C. Greece

Test 2a:Insider trading vs Not

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,033**	**	DV	**-0,070**	*	DV	**0,125**	*
	(0,016)			(0,037)			(0,070)	
SALESHA	**-0,013**	***	LNMV	**0,025**	***	LNMV	**0,041**	***
	(0,002)			(0,025)			(0,009)	
OPM	**0,335**	***	ROCE	**-0,359**	***	ROCE	**-0,473**	***
	(0,030)			(0,087)			(0,119)	
CLSFU	**0,030**	***	CLSFU	**0,060**	***	DEBT	**-0,021**	***
	(0,008)			(0,060)			(0,005)	
Constant	0,002		Constant	0,010		Constant	0,019	
	(0,001)			(0,007)			(0,015)	
R^2 adj.	0,819		R^2 adj.	0,503		R^2 adj.	0,477	
Sample size	205		Sample size	205		Sample size	205	

Test 2b:Large vs Small Purchases

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,082**	***	DV	**0,079**	***	DV	**-0,123**	***
	(0,008)			(0,010)			(0,062)	
SALETAS	**-0,063**	***	SALETAS	**-0,012**	***	NAVSH	**0,014**	**
	(0,005)			(0,004)			(0,006)	
OPM	**-0,418**	***	NPM	**-0,183**	***	EPS	**-0,059**	**
	(0,059)			(0,029)			(0,024)	
ETL	**0,014**	***	ETL	**0,010**	***	ETL	**0,014**	**
	(0,003)			(0,002)			(0,007)	
Constant	0,006		Constant	0,009		Constant	0,005	
	(0,001)			(0,001)			(0,004)	
R^2 adj.	0,935		R^2 adj.	0,915		R^2 adj.	0,883	
Sample size	27		Sample size	69		Sample size	98	

Test 2c:Large vs Small Disposal

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,232**	***	DV	**0,107**	***	DV	**0,117**	***
	(0,043)			(0,024)			(0,027)	
SALESHA	**-0,018**	***	SALESHA	**0,003**	***	LNMV	**0,005**	*

	(0,003)			(0,001)			(0,003)	
EPS	**0,121**	***	EPS	**0,318**	***	EPS	**0,024**	**
	(0,027)			(0,024)			(0,010)	
DSFU	**-0,147**	***	DSFU	**-0,040**	**	DSFU	**0,104**	***
	(0,036)			(0,021)			(0,023)	
Constant	0,019		Constant	0,004		Constant	0,004	
	(0,002)			(0,001)			(0,002)	
R^2 adj.	0,895		R^2 adj.	0,970		R^2 adj.	0,587	
Sample size	22		Sample size	66		Sample size	108	

Test 2d:Large vs Small Number of Insiders

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
No cases in this category			DV	**0,171**	***	DV	**0,051**	***
				(0,009)			(0,013)	
			LNMV	**0,020**	***	SALESHA	**-0,003**	***
				(0,001)			(0,001)	
			EPS	**-0,019**	*	EPS	**0,017**	**
				(0,011)			(0,007)	
			CLSFU	**-0,010**	***	CLSFU	**-0,009**	***
				(0,003)			(0,002)	
			Constant	0,004		Constant	0,017	
				(0,001)			(0,001)	
			R^2 adj.	0,957		R^2 adj.	0,657	
			Sample size	205		Sample size	205	

Panel D. UK

Test 2a:Insider trading vs Not

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,241**	*	DV	**-0,354**	***	DV	**-0,076**	***
	(0,144)			(0,035)			(0,018)	
NAVSH	**0,114**	**	LNMV	**0,028**	***	SALETAS	**0,018**	**
	(0,044)			(0,004)			(0,008)	
Prof. Ratios	**No sig. results**		OPM	**0,431**	***	OPM	**0,046**	***
				(0,054)			(0,015)	
ETL	**0,176**	**	DEBT	**-0,010**	*	DEBT	**-0,008**	***
	(0,076)			(0,006)			(0,003)	
Constant	0,018		Constant	0,014		Constant	0,039	
	(0,008)			(0,012)			(0,007)	
R^2 adj.	0,218		R^2 adj.	0,626		R^2 adj.	0,622	
Sample size	293		Sample size	282		Sample size	284	

Test 2b:Large vs Small Purchases

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,021**	***	DV	**-0,049**	**	DV	**-0,045**	***
	(0,005)			(0,020)			(0,008)	
RESTAS	**0,015**	*	SALESHA	**0,004**	**	RESTAS	**0,861**	***
	(0,009)			(0,002)			(0,021)	
OPM	**0,632**	***	EPS	**0,080**	***	EPS	**0,641**	***
	(0,034)			(0,024)			(0,016)	
ETL	**-0,182**	***	ETL	**0,036**	**	DEBT	**-0,141**	***
	(0,014)			(0,014)			(0,004)	
Constant	0,006		Constant	0,006		Constant	0,007	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,951		R^2 adj.	0,802		R^2 adj.	0,908	
Sample size	162		Sample size	155		Sample size	186	

Test 2c:Large vs Small Disposal

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,116**	*	DV	**-0,172**	***	DV	**-0,229**	***
	(0,060)			(0,032)			(0,050)	
LNMV	**0,009**	*	LNMV	**0,016**	***	LNMV	**0,007**	*
	(0,004)			(0,003)			(0,005)	
EPS	**0,092**	***	EPS	**0,032**	*	EPS	**-0,014**	*
	(0,020)			(0,018)			(0,009)	
TLSFU	**-0,649**	*	ETL	**-0,025**	***	CLSFU	**0,041**	***
	(0,385)			(0,008)			(0,014)	
Constant	0,068		Constant	0,019		Constant	0,097	
	(0,006)			(0,003)			(0,007)	
R^2 adj.	0,671		R^2 adj.	0,844		R^2 adj.	0,724	
Sample size	145		Sample size	158		Sample size	176	

Test 2d:Large vs Small Number of Insiders

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,035**	*	DV	**-0,109**	***	DV	**-0,052**	**
	(0,021)			(0,021)			(0,020)	
SALESHA	**0,008**	***	SALESHA	**0,003**	**	LNMV	**0,005**	**
	(0,002)			(0,001)			(0,002)	
EPS	**-0,073**	***	EPS	**-0,022**	***	EPS	**-0,017**	***
	(0,010)			(0,005)			(0,004)	
DEBTE	**0,019**	**	DEBTE	**-0,058**	***	DEBT	**-0,009**	***
	(0,008)			(0,010)			(0,003)	
Constant	0,013		Constant	0,015		Constant	0,046	

	(0,001)			(0,001)			(0,002)	
R^2 adj.	0,689		R^2 adj.	0,574		R^2 adj.	0,419	
Sample size	291		Sample size	293		Sample size	289	
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.								

Table 9 - H2 Test 3 :OLS Regression of A.R. on Firm Financial Measures

Panel A. Australia								
Test 3a:Insider trading vs Not								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,022**	***	DV	**0,012**	***	DV	**-0,066**	***
	(0,007)			(0,003)			(0,006)	
RESTAS	**-0,001**	**	SALESHA	**0,001**	**	LNMV	**0,005**	***
	(0,000)			(0,001)			(0,001)	
ROCE	**-0,003**	*	EPS	**-0,002**	*	PLOWB	**-0,003**	*
	(0,002)			(0,001)			(0,001)	
TLSFU	**-0,045**	***	DEBTE	**-0,005**	**	TLSFU	**0,010**	***
	(0,017)			(0,002)			(0,004)	
Constant	0,027		Constant	0,009		Constant	0,006	
	(0,006)			(0,003)			(0,004)	
R^2 adj.	0,254		R^2 adj.	0,304		R^2 adj.	0,483	
Sample size	456		Sample size	455		Sample size	156	
Test 3b:Large vs Small Purchases								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,022**	***	DV	**0,010**	***	DV	**-0,021**	***
	(0,005)			(0,002)			(0,004)	
SALETAS	**0,011**	***	SALETAS	**0,005**	***	LNMV	**0,004**	***
	(0,002)			(0,001)			(0,001)	
NPM	**-0,001**	***	EPS	**-0,006**	***	EPS	**0,023**	***
	(0,000)			(0,001)			(0,004)	
TLSFU	**-0,086**	***	DSFU	**0,029**	***	TLSFU	**-0,164**	***
	(0,014)			(0,007)			(0,019)	
Constant	0,023		Constant	0,005		Constant	0,026	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,681		R^2 adj.	0,802		R^2 adj.	0,915	
Sample size	332		Sample size	339		Sample size	309	
Test 3c:Large vs Small Disposal								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,052**	***	DV	**0,010**	***	DV	**-0,220**	***
	(0,013)			(0,004)			(0,039)	
SALETAS	**0,011**	**	SALESHA	**0,010**	*	LNMV	**0,020**	***

	(0,005)			(0,001)			(0,005)	
OPM	**-0,026**	**	OPM	**0,003**	**	OPM	**0,453**	***
	(0,011)			(0,001)			(0,099)	
CLSFU	**-0,012**	*	CLSFU	**0,409**	***	CLSFU	**0,065**	**
	(0,007)			(0,082)			(0,028)	
Constant	0,017		Constant	0,007		Constant	0,077	
	(0,003)			(0,001)			(0,006)	
R^2 adj.	0,536		R^2 adj.	0,790		R^2 adj.	0,662	
Sample size	176		Sample size	118		Sample size	129	
Test 3d:Large vs Small Number of Insiders								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,037**	***	DV	**0,051**	***	DV	**-0,038**	***
	(0,005)			(0,019)			(0,005)	
LNMV	**0,004**	***	LNMV	**-0,015**	***	SALETAS	**-0,002**	**
	(0,001)			(0,003)			(0,001)	
OPM	**0,014**	**	OPM	**0,047**	***	EPS	**0,031**	***
	(0,007)			(0,014)			(0,004)	
DSFU	**0,005**		DSFU	**-0,433**	***	CLSFU	**0,024**	***
	(0,003)	*		(0,036)			(0,008)	
Constant	0,007		Constant	0,004		Constant	0,012	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,540		R^2 adj.	0,727		R^2 adj.	0,709	
Sample size	456		Sample size	454		Sample size	456	
Panel B. Germany								
Test 3a:Insider trading vs Not								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,025**	***	DV	**0,011**	***	DV	**-0,025**	***
	(0,006)			(0,003)			(0,005)	
RESTAS	**0,004**	**	SALETAS	**-0,002**	*	SALETAS	**0,008**	***
	(0,002)			(0,001)			(0,003)	
OPM	**-0,012**	*	OPM	**0,004**	**	ROSC	**-0,020**	**
	(0,008)			(0,002)			(0,009)	
DEBT	**0,002**	***	DSFU	**-0,001**	***	DSFU	**0,004**	**
	(0,001)			0,001			(0,002)	
Constant	0,031		Constant	0,013		Constant	0,010	
	(0,002)			(0,001)			(0,001)	
R^2 adj.	0,456		R^2 adj.	0,596		R^2 adj.	0,443	
Sample size	393		Sample size	391		Sample size	396	
Test 3b:Large vs Small Purchases								
2007			**2008**			**2009**		

Variables	Coefficients	Sig.	Variables	Coefficients	Sig.	Variables	Coefficients	Sig.
DV	**0,006**	**	DV	**0,011**	***	DV	**-0,031**	***
	(0,003)			(0,003)			(0,006)	
NAVSH	**0,040**	***	RESSFU	**-0,011**	**	LNMV	**0,003**	***
	(0,007)			(0,044)			(0,001)	
OPM	**0,062**	***	NPM	**-0,039**	***	EPS	**-0,009**	***
	(0,020)			(0,013)			(0,001)	
TLSFU	**0,003**	***	DEBTE	**0,002**	***	TLSFU	**0,008**	**
	(0,001)			(0,000)			(0,003)	
Constant	0,016		Constant	0,019		Constant	0,036	
	(0,001)			(0,001)			(0,010)	
R^2 adj.	0,684		R^2 adj.	0,800		R^2 adj.	0,852	
Sample size	184		Sample size	222		Sample size	143	
Test 3c:Large vs Small Disposal								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,017**	***	DV	**0,007**	***	DV	**-0,079**	***
	(0,006)			(0,002)			(0,011)	
RESTAS	**-0,022**	*	RESTAS	**-0,042**	***	RESTAS	**0,065**	*
	(0,012)			(0,004)			(0,036)	
OPM	**0,041**	**	OPM	**-0,036**	***	OPM	**-0,004**	**
	(0,020)			(0,007)			(0,002)	
DEBT	**0,002**	***	DEBT	**0,003**	***	TLSFU	**0,191**	***
	(0,001)			(0,000)			(0,032)	
Constant	0,036		Constant	0,017		Constant	0,048	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,495		R^2 adj.	0,932		R^2 adj.	0,728	
Sample size	132		Sample size	83		Sample size	78	
Test 3d:Large vs Small Number of Insiders								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,015**	***	DV	**0,023**	***	DV	**0,005**	*
	(0,004)			(0,005)			(0,002)	
SALETAS	**0,005**	**	SALETAS	**-0,002**	**	RESSFU	**-0,013**	***
	(0,002)			(0,001)			(0,005)	
OPM	**0,048**	***	ROCE	**-0,037**	***	OPM	**-0,003**	***
	(0,014)			(0,007)			(0,001)	
TLSFU	**0,037**	***	TLSFU	**-0,005**	***	TLSFU	**0,035**	**
	(0,004)			(0,001)			(0,014)	
Constant	0,021		Constant	0,005		Constant	-0,001	***
	(0,001)			(0,002)			(0,000)	
R^2 adj.	0,702		R^2 adj.	0,682		R^2 adj.	0,574	
Sample size	402		Sample size	403		Sample size	400	

Panel C. Greece								
Test 3a:Insider trading vs Not								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,164**	***	DV	**-0,065**	**	DV	**-0,041**	***
	(0,020)			(0,025)			(0,010)	
RESSFU	**-0,092**	***	RESSFU	**0,106**	**	LNMV	**-0,016**	***
	(0,033)			(0,051)			(0,002)	
ROSC	**-0,047**	**	ROSC	**-0,039**	***	EPS	**0,024**	**
	(0,018)			(0,015)			(0,010)	
CGEAR	**0,051**	***	DSFU	**0,059**	**	CLSFU	**0,012**	***
	(0,013)			(0,023)			(0,004)	
Constant	0,056		Constant	0,041		Constant	0,021	
	(0,007)			(0,007)			(0,003)	
R^2 adj.	0,572		R^2 adj.	0,534		R^2 adj.	0,603	
Sample size	205		Sample size	204		Sample size	205	
Test 3b:Large vs Small Purchases								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,276**	***	DV	**-0,082**		DV	**-0,226**	***
	(0,025)			(0,020)			(0,028)	
RESSFU	**0,141**	***	RESTAS	**0,342**	***	SALETAS	**0,113**	***
	(0,045)			(0,071)			(0,015)	
EPS	**0,076**	***	OPM	**-0,366**	***	EPS	**-0,124**	***
	(0,024)			(0,034)			(0,029)	
CLSFU	**0,037**	***	CLSFU	**0,013**	***	DSFU	**0,252**	***
	(0,011)			(0,004)			(0,034)	
Constant	0,037		Constant	0,011		Constant	0,028	
	(0,004)			(0,003)			(0,002)	
R^2 adj.	0,836		R^2 adj.	0,952		R^2 adj.	0,880	
Sample size	116		Sample size	124		Sample size	99	
Test 3c:Large vs Small Disposal								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,271**	***	DV	**0,115**	***	DV	**0,051**	**
	(0,019)			(0,031)			(0,024)	
RESSFU	**0,130**	***	RESSFU	**0,435**	***	SALETAS	**0,017**	***
	(0,034)			(0,068)			(0,004)	
OPM	**-0,174**	***	EPS	**-0,176**	***	EPS	**0,042**	*
	(0,060)			(0,031)			(0,025)	
CGEAR	**0,057**	***	CGEAR	**-0,553**	***	CLSFU	**-0,178**	***
	(0,013)			(0,055)			(0,032)	
Constant	0,051		Constant	0,022		Constant	0,044	
	(0,005)			(0,002)			(0,004)	

R^2 adj.	0,808		R^2 adj.	0,897		R^2 adj.	0,852	
Sample size	110		Sample size	74		Sample size	56	
Test 3d:Large vs Small Number of Insiders								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,221**	***	DV	**0,046**	***	DV	**-0,041**	**
	(0,015)			(0,010)			(0,016)	
RESSFU	**0,071**	***	RESSFU	**0,066**	***	SALETAS	**0,036**	**
	(0,025)			(0,016)			(0,016)	
ROSC	**-0,021**	*	OPM	**-0,076**	***	OPM	**-0,014**	***
	(0,014)			(0,018)			(0,001)	
DEBT	**0,012**	***	CGEAR	**-0,105**	***	CLSFU	**-0,054**	***
	(0,002)			(0,011)			(0,015)	
Constant	0,010		Constant	0,013		Constant	0,014	
	(0,002)			(0,001)			(0,001)	
R^2 adj.	0,853		R^2 adj.	0,768		R^2 adj.	0,935	
Sample size	205		Sample size	205		Sample size	205	
Panel D. UK								
Test 3a:Insider trading vs Not								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,016**	***	DV	**-0,174**	***	DV	**-0,023**	***
	(0,003)			(0,055)			(0,008)	
LNMV	**-0,002**	***	SALETAS	**0,145**	***	LNMV	**0,002**	**
	(0,000)			(0,033)			(0,001)	
NPM	**-0,006**	***	NPM	**0,160**	*	OPM	**-0,017**	**
	(0,002)			(0,089)			(0,009)	
IGEAR	**0,005**	**	DEBTE	**0,027**	***	CLSFU	**-0,002**	*
	(0,002)			(0,006)			(0,002)	
Constant	0,016		Constant	0,207		Constant	0,011	
	(0,002)			(0,036)			(0,003)	
R^2 adj.	0,558		R^2 adj.	0,616		R^2 adj.	0,419	
Sample size	271		Sample size	269		Sample size	283	
Test 3b:Large vs Small Purchases								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,020**	***	DV	**0,049**	***	DV	**-0,028**	***
	(0,004)			(0,003)			(0,004)	
LNMV	**-0,003**	***	LNMV	**-0,005**	***	LNMV	**0,003**	***
	(0,001)			(0,000)			(0,001)	
NPM	**-0,020**	***	OPM	**-0,011**	***	NPM	**0,042**	***
	(0,007)			(0,003)			(0,006)	
IGEAR	**0,007**	***	CGEAR	**0,001**	**	CLSFU	**-0,002**	**

	(0,002)			(0,000)			(0,001)	
Constant	0,027		Constant	0,014		Constant	0,017	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,702		R^2 adj.	0,790		R^2 adj.	0,731	
Sample size	194		Sample size	218		Sample size	207	
Test 3c:Large vs Small Disposal								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,017**	***	DV	**0,026**		DV	**-0,033**	***
	(0,006)			(0,005)			(0,005)	
LNMV	**-0,003**	***	LNMV	**-0,004**	***	LNMV	**0,003**	***
	(0,001)			(0,000)			(0,001)	
NPM	**-0,004**	**	OPM	**-0,010**	*	ROSC	**-0,017**	***
	(0,002)			(0,005)			(0,004)	
DEBTE	**-0,002**	***	DEBTE	**-0,002**	***	CLSFU	**0,006**	***
	(0,001)			(0,001)			(0,001)	
Constant	0,004		Constant	0,006		Constant	0,035	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,615		R^2 adj.	0,739		R^2 adj.	0,641	
Sample size	159		Sample size	134		Sample size	154	
Test 3d:Large vs Small Number of Insiders								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,011**	***	DV	**0,038**	***	DV	**-0,029**	***
	(0,003)			(0,004)			(0,004)	
RESTAS	**-0,008**	**	LNMV	**-0,005**	***	LNMV	**0,003**	***
	(0,003)			(0,000)			(0,001)	
NPM	**-0,073**	***	OPM	**-0,007**	**	NPM	**0,022**	***
	(0,014)			(0,003)			(0,005)	
TLSFU	**0,046**	***	CLSFU	**0,003**	***	DEBTE	**-0,001**	***
	(0,013)			(0,001)			(0,000)	
Constant	0,007		Constant	0,010		Constant	0,008	
	(0,001)			(0,001)			(0,001)	
R^2 adj.	0,617		R^2 adj.	0,641		R^2 adj.	0,630	
Sample size	282		Sample size	282		Sample size	293	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 10 - Results of H3

Panel A: H3 Test 1- Logistic Regression							
2004-2005				**2005-2006**			
1.Austalia							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			867	*Cases Included in Analysis*			985
Missing Cases			45	*Missing Cases*			17
Total			912	*Total*			912
Accuracy Rate			50,60%	*Accuracy Rate*			50,90%
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
COC	**-0,059**	*	0,943	COC	**0,087**	*	1,091
	(0,034)				(0,052)		
2.Germany							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			759	*Cases Included in Analysis*			745
Missing Cases			49	*Missing Cases*			63
Total			808	*Total*			808
Accuracy Rate			51%	*Accuracy Rate*			51,90%
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
COC	**-0,332**	*	0,717	COC	**-0,408**	*	0,665
	(0,179)				(0,243)		
3.Greece							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			403	*Cases Included in Analysis*			406
Missing Cases			7	*Missing Cases*			4
Total			410	*Total*			410
Accuracy Rate			50,90%	*Accuracy Rate*			50,50%
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
COC	**-1,745**	*	0,175	COC	**1,214**	*	0,367
	(0,947)				(0,734)		
4.UK							
Dependent variable			Year	*Dependent variable*			Year
Cases Included in Analysis			550	*Cases Included in Analysis*			555
Missing Cases			44	*Missing Cases*			39
Total			594	*Total*			594
Accuracy Rate			50,00%	*Accuracy Rate*			50,80%
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**

COC	**-0,855**	**	0,425	COC	**0,834**	*	0,304
	(0,426)				(0,453)		

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel B: H3 Test 2:OLS Regression of Accruals on Firm Financial Measures

1. Australia

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,455**	***	DV	**0,134**	***	DV	**-0,294**	***
	(0,087)			(0,017)			(0,072)	
LNMV	**0,065**	***	RESTAS	**-0,403**	***	LNMV	**0,033**	***
	(0,016)			(0,026)			(0,012)	
OPM	**0,170**	***	NPM	**-0,006**	***	OPM	**0,027**	***
	(0,018)			(0,001)			(0,001)	
CLSFU	**0,091**	**	CLSFU	**-0,045**	**	CLSFU	**-0,511**	***
	(0,035)			(0,017)			(0,163)	
Constant	0,034		Constant	0,020		Constant	0,230	
	(0,027)			(0,009)			(0,022)	
R^2 adj.	0,519		R^2 adj.	0,436		R^2 adj.	0,934	
Sample size	448		Sample size	450		Sample size	456	

2.Germany

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,055**	***	DV	**0,034**	*	DV	**-0,029**	*
	(0,014)			(0,022)			(0,017)	
LNMV	**-0,007**	***	SALETAS	**-0,019**	**	LNMV	**0,007**	***
	(0,002)			(0,008)			(0,002)	
OPM	**0,316**	***	OPM	**0,058**	***	ROCE	**0,083**	***
	(0,041)			(0,010)			(0,024)	
IGEAR	**-0,009**	*	IGEAR	**0,004**	**	CGEAR	**0,012**	***
	(0,005)			(0,002)			(0,003)	
Constant	0,009		Constant	0,020		Constant	0,009	
	(0,003)			(0,005)			(0,004)	
R^2 adj.	0,584		R^2 adj.	0,507		R^2 adj.	0,503	
Sample size	385		Sample size	397		Sample size	390	

3. Greece

2004			2005			2006		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,012**	**	DV	**-0,045**	***	DV	**-0,142**	***
	(0,006)			(0,016)			(0,040)	

RESSFU	**-0,075**	***	RESTAS	**0,045**	**	RESTAS	**0,109**	*
	(0,014)			(0,022)			(0,065)	
ROCE	**0,069**	***	OPM	**-0,037**	***	OPM	**0,009**	*
	(0,008)			(0,001)			(0,005)	
CGEAR	**0,143**	***	CGEAR	**0,073**	**	DEBT	**-0,010**	***
	(0,014)			(0,028)			(0,002)	
Constant	0,012		Constant	0,025		Constant	0,106	
	(0,002)			(0,003)			(0,011)	
R^2 adj.	0,601		R^2 adj.	0,818		R^2 adj.	0,694	
Sample size	205		Sample size	205		Sample size	205	

4.UK

2004			**2005**			**2006**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,155**	***	DV	**-0,440**	***	DV	**-0,124**	***
	(0,031)			(0,034)			(0,031)	
LNMV	**0,016**	***	LNMV	**0,045**	***	LNMV	**-0,010**	***
	(0,004)			(0,005)			(0,004)	
EPS	**-0,078**	***	OPM	**0,550**	***	EPS	**0,051**	***
	(0,025)			(0,090)			(0,018)	
TLSFU	**-0,032**	***	DEBTE	**-0,018**	**	DEBT	**0,008**	*
	(0,009)			(0,008)			(0,005)	
Constant	0,033		Constant	0,023		Constant	0,029	
	(0,007)			(0,009)			(0,006)	
R^2 adj.	0,761		R^2 adj.	0,546		R^2 adj.	0,524	
Sample size	287		Sample size	288		Sample size	288	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel C: H3 Test 3:OLS Regression of Abnormal Returns on Firm Financial Measures

1. Australia

2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,038**	***	DV	**0,014**	*	DV	**-0,051**	***
	(0,009)			(0,008)			(0,006)	
LNMV	**0,003**	*	RESSFU	**-0,038**	*	LNMV	**0,003**	**
	(0,001)			(0,022)			(0,001)	
ROCE	**-0,017**	***	ROSC	**0,035**	**	ROSC	**-0,014**	**
	(0,002)			(0,016)			(0,006)	
CLSFU	**0,375**	***	CLSFU	**0,147**	**	DEBTE	**0,040**	**
	(0,035)			(0,068)			(0,014)	
Constant	0,013		Constant	0,039		Constant	0,041	
	(0,003)			(0,004)			(0,003)	
R^2 adj.	0,507		R^2 adj.	0,217		R^2 adj.	0,463	

Sample size	456		Sample size	456		Sample size	456	
2.Germany								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,027**	*	DV	**-0,029**	***	DV	**-0,009**	
	(0,016)			(0,008)			(0,003)	
RESSFU	**-0,030**	**	RESSFU	**-0,013**	*	LNMV	**0,002**	
	(0,015)			(0,006)			(0,000)	
ROCE	**-0,052**	*	ROCE	**0,087**	***	ROCE	**-0,008**	*
	(0,030)			(0,024)			(0,005)	
CLSFU	**-0,019**	***	CLSFU	**0,016**	***	**No sig. Results for Leverage**		
	(0,007)			(0,004)				
Constant	0,023		Constant	0,018		Constant	0,016	
	(0,003)			(0,002)			(0,001)	
R^2 adj.	0,340		R^2 adj.	0,508		R^2 adj.	0,427	
Sample size	391		Sample size	394		Sample size	394	
3. Greece								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	Sig.
DV	**-0,109**	**	DV	**-0,044**	**	DV	**-0,024**	*
	(0,045)			(0,022)			(0,013)	
LNMV	**-0,008**	*	SALETAS	**-0,010**	**	LNMV	**-0,014**	***
	(0,004)			(0,004)			(0,002)	
EPS	**0,032**	*	EPS	**-0,015**	*	OPM	**-0,003**	***
	(0,028)			(0,009)			(0,001)	
DEBT	**0,002**	*	DEBTE	**-0,017**	**	CLSFU	**0,011**	***
	(0,001)			(0,008)			(0,003)	
Constant	0,095		Constant	0,032		Constant	0,041	
	(0,005)			(0,003)			(0,003)	
R^2 adj.	0,648		R^2 adj.	0,674		R^2 adj.	0,635	
Sample size	205		Sample size	205		Sample size	205	
4.UK								
2007			**2008**			**2009**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,015**	***	DV	**0,028**	***	DV	**-0,016**	***
	(0,004)			(0,003)			(0,004)	
SALETAS	**-0,007**	***	LNMV	**-0,004**	***	SALESHA	**0,002**	**
	(0,002)			(0,000)			(0,001)	
ROCE	**-0,027**	***	ROSC	**-0,015**	***	NPM	**0,023**	**

	(0,006)			(0,003)			(0,011)	
CLSFU	**0,004**	***	DSFU	**0,002**	***	CLSFU	**-0,005**	*
	(0,002)			(0,001)			(0,003)	
Constant	0,005		Constant	0,005		Constant	0,014	
	(0,001)			(0,001)			(0,002)	
R^2 adj.	0,540		R^2 adj.	0,664		R^2 adj.	0,516	
Sample size	283		Sample size	276		Sample size	286	
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.								

Table 11 - Results of H4

Convergency test							Pair-wise *t*-tests for equality of means		
	2006		2007		2008				
Test Variables	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	2006 vs 2007	2006 vs 2008	2007 vs 2008
DIFF(NI)	**0,1199**	0,1143	**0,0701**	0,0711	0,0820	0,1336	*		
DIFF(NA)	**0,1799**	0,2255	**0,3495**	0,4318	**0,1565**	0,1949	*		**
DIFF(RONA)	**0,1178**	0,2131	**0,4477**	0,9542	**0,1318**	0,2480	*		*
DIFF(EPS)	**0,4680**	0,5143	**0,2395**	0,2471	**0,2227**	0,2351	*	**	
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively									

Table 12 – H5 Financial Statement Effects

Panel A:Logistic Regression 2006-2007				**Panel B:Logistic Regression 2007-2008**			
Dependent variable	year dummy			*Dependent variable*	year dummy		
Cases Included in Analysis	393			*Cases Included in Analysis*	405		
Missing Cases	15			*Missing Cases*	3		
Total	408			*Total*	408		
Accuracy Rate	51,40%			*Accuracy Rate*	50,10%		
Variables	**Coefficients**	**Sig.**	**Exp(B)**	**Variables**	**Coefficients**	**Sig.**	**Exp(B)**
SALETAS	**-1,104**	***	0,332	LNMV	**0,301**	*	1,352
	(0,402)				(0,035)		
LNMV	**-0,540**	***	0,583	DIVCOV	**-0,083**	*	0,92
	(0,066)				(0,045)		
DIVSH	**0,782**	**	2,186	MVBV	**-0,057**	**	0,945
	(0,394)				(0,026)		
MVBV	**0,262**	***	1,3	PEG	**-0,119**	*	0,888
	(0,054)				(0,069)		
PEG	**-0,087**	*	0,917	PLOWB	**-0,058**	**	0,944
	(0,052)				(0,025)		
DIVSHG	**-1,702**	***	0,182	OPM	**-1,672**	**	0,188
	(0,691)				(0,733)		
PLOWB	**0,147**	***	1,159	CUR	**-0,230**	**	0,795
	(0,043)				(0,100)		
ROSC	**0,652**	***	1,92	CASH	**1,002**	***	2,723
	(0,243)				(0,327)		
CUR	**1,619**	***	5,046	QUI	**-0,109**	***	0,896
	(0,371)				(0,028)		
QUI	**0,124**	***	1,132	DEBT	**-0,117**	**	0,89
	(0,041)				(0,050)		
CFSH	**0,250**	**	1,284	Constant	**-0,282**		0,754
	(0,106)				(0,355)		
WCR	**-0,171**	***	0,843				
	(0,053)						
DEBT	**0,275**	***	1,316				
	(0,079)						
ETL	**-2,066**	***	0,127				
	(0,444)						
DSFU	**-0,414**	*	0,661				
	(0,233)						

Constant	**1,580**	**	4,857				
	(0,672)						
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.							

Table 13 – H5 Volatility in income statement and balance sheet values

	Panel A						Panel B	
	2006		2007		2008		Pair-wise *F*-test for equality of variances	
	US GAAP		IFRS		IFRS			
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2006-2007**	**2007-2008**
Size								
SALESHA	6,37551	**6,66143**	5,16566	**4,68424**	5,76340	4,90646	***	
NAVSH	3,87002	3,75021	3,72820	**3,53414**	4,12446	**4,48268**		**
SALETAS	0,75259	0,44080	0,74420	0,46421	0,79002	0,47327		
RESTAS	-0,04482	0,94384	-0,02624	0,97822	-0,04482	1,03433		
RESSFU	0,10074	1,37256	-0,01145	1,44616	0,17240	1,53060		
Investment								
DIVSH	0,32906	0,50077	0,41181	0,54194	0,38348	0,52744		
DIVYI	0,10469	**0,15613**	0,01403	**0,03605**	0,02872	**0,06733**	**	***
DIVCOV	1,62463	**1,73485**	2,09973	**4,59897**	0,99537	**2,07454**	***	***
PE	0,36297	**0,68327**	0,35130	**0,93371**	0,24937	1,97702	*	
HOLTA	0,01289	**0,01495**	0,01905	**0,02132**	0,01817	0,01997	***	
Growth								
MVBV	1,38051	7,52705	3,94362	5,29489	3,14018	5,88780		
EPSG	0,29078	1,44912	0,28594	5,33395	-0,24138	3,12616		
PEG	1,26812	**4,81105**	0,12099	**1,45390**	-0,28179	**2,18778**	***	**
DIVSHG	0,11515	0,22666	0,02533	**0,26382**	0,03042	**0,30685**		*
Profitability								
PLOWB	1,69894	**2,26980**	2,77757	**5,66592**	1,62486	5,15622	***	
OPM	0,11767	0,16357	0,10926	0,18289	0,05706	0,19389		
NPM	0,09267	**0,13937**	0,08020	**0,19833**	0,03654	**0,15217**	**	*
ROSC	0,17994	1,21950	0,17771	0,58060	0,06361	1,15292		
EPS	1,04832	**1,49137**	1,24003	**1,91733**	1,03546	**2,50946**	***	*
ROCE	0,15146	0,44016	0,14583	0,53882	0,12318	0,41018		
Liquidity								
CUR	0,90687	**0,58619**	2,00257	**3,57877**	1,27420	**0,67458**	***	***
CASH	0,36189	**0,30140**	0,38582	**0,35767**	0,52682	**0,47266**	**	***
QUI	3,99649	**4,30838**	6,02380	**8,21090**	3,64236	**3,69135**	***	***
CFSH	1,36842	**1,67405**	1,98856	**2,63516**	1,88562	2,91371	***	
CFM	0,15268	0,18418	0,14678	0,22833	0,09483	0,20265		
WCR	1,61378	**4,03024**	0,34670	**2,53363**	0,01998	2,11339	***	

STOCKT	3,39249	2,45957	3,40696	**2,62246**	3,25017	**2,38259**		*
Leverage								
DEBT	4,61497	2,34932	5,21586	2,85328	4,73557	2,55109		
ETL	1,19364	**1,35684**	0,64038	**0,49062**	0,58790	0,46682	***	
TLSFU	1,53894	**2,29977**	1,87220	**6,08082**	1,63482	4,34613	**	
CGEAR	1,59147	5,41552	1,50701	5,51884	1,83969	6,83706		
CLSFU	0,77387	1,22769	0,83213	**1,93798**	0,79379	**5,90788**		**
INTCOV	5,92040	11,23310	6,47149	12,62482	4,57547	11,90530		
IGEAR	0,13560	**0,22935**	0,15359	**0,39948**	0,13881	**3,21325**	***	**
DEBTE	0,43196	**0,47109**	0,57554	**1,19027**	0,67840	1,34788	***	
DSFU	0,51244	0,88999	0,48485	**0,75645**	0,52587	**1,31439**		***
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.								

Table 14 – H6 Results

Panel A: Test 1 - Earnings Volatility							**Pair-wise *F*-tests for equality of variance**	
	2006 - US GAAP		**2007 - IFRS**		**2008 - IFRS**			
Test Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2006 vs 2007**	**2007 vs 2008**
Δ(NP/TA)	0,0988	**1,2036**	-0,0677	**2,3198**	0,7559	**14,2594**	*	**
Δ(NP/OCF)	1,2398	**5,2268**	0,2605	**8,2668**	0,7054	**13,4514**	*	*
Sample size	186		188		200			
Panel B: Accruals and Quality								
Test 2a:Accruals-OCF								
	2006	**Sig**	**2007**	**Sig**	**2008**	**Sig**		
Pearson Correlation of ACCR-OCF	**-0,504**	***	**0,125**	*	**-0,278**	***		
Sample size	197		197		203			
Test 2b: Earnings Quality								
	2006- US GAAP		**2007- IFRS**		**2008- IFRS**			
Test Variables	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**		
R^2 adj.	**0,181**		**0,288**		**0,156**			
F test	44,198	***	80,109	***	38,262	***		
OCF	-0,285	***	2,314	***	4,343	***		
	(0,403)		(0,259)		(0,702)			
Sample size	197		197		203			
Panel C: Test 2c - OLS Regression of Accruals on Firm Financial Measures								
2006 - US GAAP			**2007 - IFRS**			**2008 - IFRS**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
SALETAS	**-0,007**	**	NAVSH	**-0,001**	*	SALESHA	**-0,001**	**
	(0,004)			(0,000)			(0,000)	
RESTAS	**-0,003**	*	SALETAS	**-0,01**	***	SALETAS	**-0,021**	***
	(0,002)			(0,003)			(0,003)	
LNMV	**0,001**	*	RESTAS	**-0,006**	***	PLOWB	**0,001**	**
	(0,000)			(0,001)			(0,000)	
OPM	**0,19**	***	RESSFU	**-0,002**	**	OPM	**0,362**	***
	(0,018)			(0,001)			(0,021)	
NPM	**0,425**	***	OPM	**0,118**	***	NPM	**0,095**	***
	(0,028)			(0,021)			(0,020)	
ROCE	**0,006**	*	NPM	**0,215**	***	ROSC	**0,004**	***

	(0,003)			(0,028)			(0,001)	
CGEAR	**0,001**	***	ROSC	**0,006**	**	ROCE	**0,009**	***
	(0,000)			(0,003)			(0,003)	
INTCOV	**0,001**	**	EPS	**0,018**	***	DEBT	**-0,001**	**
	(0,000)			(0,002)			(0,000)	
Constant	-0,005		DEBT	**-0,002**	***	Constant	0,007	*
	(0,005)			(0,000)			(0,004)	
			CLSFU	**-0,003**	***			
				(0,001)				
			IGEAR	**-0,007**	*			
				(0,003)				
			Constant	0,024	***			
				(0,004)				
R^2 adj.	0,787		R^2 adj.	0,756		R^2 adj.	0,803	
Sample size	170		Sample size	175		Sample size	184	
Panel D: Test 3								
a) Logistic Regression (SPP)								
2006-2007			**2006-2008**					
Cases Included in Analysis		393	*Cases Included in Analysis*		394			
Accuracy Rate		51,40%	*Accuracy Rate*		51,50%			
Variable	**Coefficients**	**Sig.**	**Variable**	**Coefficients**	**Sig.**			
SPP	**-2,130**	**	SPP	**-1,146**	**			
	(0,870)			(0,565)				
b) Logistic Regression (LNL)								
2006-2007			**2006-2008**					
Cases Included in Analysis		393	*Cases Included in Analysis*		394			
Accuracy Rate		51,40%	*Accuracy Rate*		51,50%			
Variable	**Coefficients**	**Sig.**	**Variable**	**Coefficients**	**Sig.**			
LNL	**1,722**	***	LNL	**1,614**	**			
	(0,631)			(0,623)				
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.								

Table 15 – H7 Abnormal returns

	Event-day		5-day		10-day			Event-day		5-day		10-day	
Australia	**AR**	**Sig**	**CAR**	**Sig**	**CAR**	**Sig**	**UK**	**AR**	**Sig**	**CAR**	**Sig**	**CAR**	**Sig**
AMP	-5,89%	***	9,62%	**	9,45%	**	ADM	-0,49%		9,54%		16,37%	*
	(-2,956)		(2,257)		(2,218)			(-0,209)		(0,978)		(1,678)	
ANZ	0,12%		19,62%	***	23,91%	***	AML	-0,26%		12,08%	***	22,59%	***
	(0,056)		(4,217)		(5,14)			(-0,142)		(3,267)		(6,111)	
AUB	0,74%		9,29%		17,69%	**	AV.	-2,18%		16,90%	***	21,57%	***
	(0,46)		(1,605)		(3,057)			(-1,214)		(3,746)		(4,781)	
BOQ	0,63%		-4,85%		-10,81%	*	BARC	-2,80%		22,66%	*	26,95%	**
	(0,282)		(-0,79)		(-1,762)			(-1,18)		(1,811)		(2,154)	
CIX	-0,83%		-13,85%	*	-2,73%		BGEO	-3,63%		-27,29%	**	-42,77%	***
	(-0,219)		(-1,754)		(-0,346)			-(1,114)		(-1,984)		(-3,109)	
NAB	-4,62%	**	3,92%		15,89%	***	CBG	1,44%		20,98%	*	4,48%	
	(-2,218)		(0,749)		(3,035)			(0,516)		(1,925)		(0,41)	
NHF	10,72%	***	3,47%		16,53%		CTR	0,11%		-7,41%	*	-6,52%	
	(4,174)		(0,253)		(1,207)			(0,059)		(-1,739)		(-1,531)	
QBE	-3,24%		15,73%	**	15,23%	**	GACB	-1,47%		-1,88%		-4,95%	*
	(-1,473)		(2,372)		(2,296)			(-1,099)		(-0,632)		(-1,669)	
SUN	-4,53%	*	-16,83%	***	-8,14%		HSBA	0,65%		6,33%	*	13,85%	***
	(-1,69)		(-3,038)		(-1,469)			(0,56)		(1,738)		(3,804)	
TWR	-4,23%	**	-19,22%	***	-22,53%	***	III	-3,83%		-6,36%		-16,74%	**
	(-2,052)		(-3,325)		(-3,898)			(-0,779)		(-0,897)		(-2,36)	
WBB	3,49%	**	0,97%		-2,17%		IPO	-1,67%		-7,54%		-10,81%	**
	(2,177)		(0,268)		(-0,598)			(-0,663)		(-1,64)		(-2,352)	
Germany							LGEN	-2,47%		18,04%	***	20,37%	***
ALV	-2,54%	*	-6,82%		-3,63%			(-1,347)		(3,56)		(4,021)	
	(-1,926)		(-1,37)		(-0,728)		LLOY	7,73%	***	5,34%		-3,62%	
ARL	-5,10%	***	3,03%		-2,39%	***		(3,441)		(0,58)		(-0,393)	
	(-3,253)		(0,481)		(-5,07)		PAG	-10,12%	*	-7,83%		-13,81%	
CBK	-2,84%		-9,45%		-42,95%	***		(-1,679)		(-0,383)		(-0,675)	
	(-1,1)		(-1,115)		(-8,261)		PFG	4,11%	**	3,29%		2,02%	
COM	-4,90%	**	-18,15%	***	-39,64%	***		(2,265)		(0,457)		(0,28)	
	(-2,244)		(-3,783)		(-3,851)		PRU	-3,27%	*	15,52%	***	16,90%	***
DBK	0,35%		-13,36%	**	-21,20%			(-1,831)		(3,401)		(3,703)	
	(0,215)		(-2,427)		(-0,379)		RBS	-4,38%	*	12,59%		12,60%	
DPB	-3,95%	*	-14,41%		-33,71%	***		(-1,797)		(1,306)		(1,307)	
	(-1,813)		(-1,58)		(-3,698)		RSA	5,52%	***	10,62%	**	15,68%	***

DRN	-1,12%		-12,00%	*	-19,59%	***		(3,445)		(1,999)		(2,952)	
	-(0,549)		(-1,688)		(-2,757)		SL.	-4,00%	*	6,08%		9,92%	
GLJ	-6,59%	**	5,64%		-0,67%			(-1,916)		(0,999)		(1,63)	
	(-2,227)		(0,711)		(-0,084)		STAN	2,47%	*	12,09%	**	7,73%	
MUV2	-2,70%	*	2,73%		9,87%	**		(1,657)		(2,394)		(1,53)	
	(-1,9)		(0,667)		(2,415)		STJ	2,97%	***	28,42%	***	22,79%	***
OLB	-0,61%		7,95%	***	7,57%	***		(4,152)		(4,03)		(3,232)	
	(-0,464)		(3,333)		(3,173)		SVI	-0,93%	*	10,16%	**	-3,22%	
OTP	-1,14%		-8,02%		-9,20%	*		(-1,942)		(2,21)		(-0,7)	
	(-0,483)		(-1,537)		(-1,763)		**Greece**						
VVV3	6,13%	*	-9,29%		-15,48%	**	ALFA	-3,22%	*	-7,34%	**	-4,61%	
	(1,86)		(-1,329)		(-2,213)			(-1,946)		(-2,285)		(-1,437)	
WUW	0,25%		-5,46%		-11,67%	**	ETE	1,31%		7,28%		15,36%	**
	(0,133)		(-0,979)		(-2,091)			(0,827)		(1,071)		(2,261)	
							EUPIK	-1,40%		-9,71%	*	0,64%	
								(-0,843)		(-1,924)		(0,127)	
							TBANK	-10,89%	***	-24,51%	***	-25,43%	***
								(-5,607)		(-3,127)		(-3,245)	
							TGEN	-3,65%	**	-6,58%		-11,66%	**
								(-2,035)		(-1,149)		(-2,036)	
							TT	-3,07%		-6,84%		-13,55%	*
								(-1,6)		(-0,929)		(-1,841)	

Code	**Event-day**		**5-day**		**10-day**		**Code**	**Event-day**		**5-day**		**10-day**	
NASDAQ	**AR**	**Sig**	**CAR**	**Sig**	**CAR**	**Sig**	**NYSE**	**AR**	**Sig**	**CAR**	**Sig**	**CAR**	**Sig**
AAME	0,32%		-20,94%	*	-29,64%	***	AFL	0,50%		10,72%	**	0,20%	
	(0,058)		(-1,838)		(-2,602)			(0,363)		(2,37)		(0,044)	
MBVT	-2,69%	*	-1,36%		-1,42%		AIZ	-5,58%	***	-9,87%	*	-5,77%	
	(-1,754)		(-0,284)		(-0,297)			(-3,447)		(-1,645)		(-0,961)	
MCBC	1,69%		26,29%	**	8,66%		BAC	-10,90%	***	30,21%	**	33,50%	**
	(0,452)		(1,978)		(0,651)			(-3,821)		(2,248)		(2,493)	
METR	0,15%		13,99%	**	8,68%		BANC	1,46%		12,28%	**	17,82%	***
	(0,067)		(2,418)		(1,501)			(0,593)		(2,008)		(2,915)	
MFSF	-0,33%		7,67%		12,27%	**	BBT	4,26%	*	40,01%	***	30,84%	**
	(-0,129)		(1,23)		(1,967)			(1,8018)		(3,297)		(2,541)	
MSFG	-1,65%		18,82%	***	28,89%	***	BBX	-5,89%	**	51,42%	**	307,30%	***
	(-0,612)		(3,086)		(4,738)			(-2,317)		(2,041)		(12,2)	
NBBC	-19,04%	***	22,41%	**	31,66%	***	BHLB	-1,09%		16,70%	***	14,21%	***
	(-5,511)		(1,993)		(2,816)			(-0,449)		(2,989)		(2,545)	
NECB	-2,78%	***	-2,97%		-13,82%	***	BOH	3,07%		12,02%	***	17,46%	***
	(-2,803)		(-1,002)		(-4,659)			(1,48)		(2,91)		(4,227)	
NFBK	-3,05%	*	7,46%	**	6,96%	**	BXS	4,33%		26,32%	***	29,35%	***

	(-1,861)		(2,158)		(2,013)			(1,572)		(3,073)		(3,428)	
NHTB	-4,33%	*	0,25%		-9,35%		C	-4,53%		22,02%	**	24,21%	***
	(-1,762)		(0,042)		(-1,62)			(-1,536)		(2,5)		(2,748)	
NPBC	-0,18%		28,17%	**	30,16%	**	CFR	2,12%	*	4,43%		6,37%	
	(-0,058)		(2,111)		(2,261)			(1,85)		(0,925)		(1,332)	
NWLI	0,73%		14,92%	**	16,38%	***	CIA	6,66%	*	18,76%	**	30,83%	***
	(0,246)		(2,376)		(2,609)			(1,827)		(2,463)		(4,049)	
OCFC	-5,97%	**	5,17%		10,29%	*	CM	7,91%	*	15,82%		38,05%	***
	(-2,578)		(0,932)		(1,854)			(1,932)		(1,602)		(3,853)	
OKSB	2,95%		31,03%	**	32,55%	**	CMA	3,24%		46,85%	***	41,15%	***
	(0,969)		(2,322)		(2,436)			(1,002)		(6,111)		(5,368)	
ONB	4,77%	*	32,47%	**	33,56%	***	COF	8,18%	***	34,58%	***	29,57%	***
	(1,774)		(2,58)		(2,667)			(3,04)		(4,657)		(3,981)	
OPOF	5,05%	*	-2,32%		15,73%	***	CPF	11,55%	**	59,12%	***	77,16%	***
	(1,805)		(-0,56)		(3,839)			(2,396)		(3,602)		(4,701)	
OSBC	6,39%	**	39,71%	*	39,08%	**	CYN	4,70%	*	26,80%	***	24,23%	***
	(2,285)		(1,924)		(1,894)			(1,735)		(2,977)		(2,692)	
OZRK	3,08%		32,51%	***	30,32%	***	FCF	2,16%		15,99%	*	23,32%	***
	(0,9)		(2,789)		(2,601)			(0,798)		(1,859)		(2,711)	
PACW	2,19%		60,65%	***	59,13%	***	FFG	-1,31%		41,42%	***	49,65%	***
	(0,664)		(3,234)		(3,153)			(-0,509)		(5,915)		(7,09)	
PCBK	-6,52%	**	24,74%	**	19,29%	*	FNB	4,73%	*	36,33%	***	42,77%	***
	(-2,049)		(2,243)		(1,749)			(1,837)		(5,077)		(5,977)	
PEBO	4,84%	*	32,90%	***	32,59%	***	HTH	0,17%	*	4,10%		8,19%	***
	(1,777)		(4,65)		(4,606)			(1,931)		(1,415)		(2,824)	
PGC	-4,13%	***	14,43%	*	10,95%		IHC	-6,42%	*	-0,69%		-5,25%	
	(-2,611)		(1,81)		(1,374)			(-1,874)		(-0,101)		(-0,766)	
PNBK	0,24%		3,89%		-10,05%	***	JPM	-1,02%	***	19,63%	***	33,61%	***
	(0,113)		(1,197)		(-3,089)			(-2,7)		(2,999)		(5,133)	
PNFP	5,47%	**	34,25%	***	42,78%	***	LNC	1,83%		6,82%	*	3,52%	
	(1,997)		(4,356)		(5,44)			(1,201)		(1,89)		(0,974)	
PROV	-2,20%		57,01%	***	47,02%	***	MET	-3,50%	***	16,18%	***	-2,43%	
	(-0,727)		(3,623)		(2,988)			(-2,651)		(5,552)		(-0,832)	
PVTB	1,37%		47,06%	***	58,71%	***	MFC	2,74%	**	5,61%	**	14,93%	***
	(0,512)		(5,675)		(7,08)			(2,063)		(2,093)		(5,568)	
PWOD	-0,63%		3,12%		19,61%	***	MSL	2,52%		15,98%	***	1,91%	
	(-0,302)		(1,141)		(7,164)			(0,947)		(2,631)		(0,315)	
RBPAA	13,57%	**	52,58%	**	56,29%	***	MTB	4,10%	*	33,28%	***	32,24%	***
	(2,438)		(2,585)		(2,767)			(1,716)		(5,371)		(5,203)	
RNST	1,89%		32,36%	***	33,58%	***	NYCB	4,42%	**	16,10%	**	8,22%	
	(0,697)		(2,79)		(2,896)			(2,075)		(2,553)		(1,303)	
SASR	-2,91%		32,62%	**	44,18%	***	PB	3,65%		14,48%	**	21,90%	***

	(-1,183)		(2,118)		(2,868)			(1,492)		(2,458)		(3,718)	
SBBX	-9,09%	**	6,04%		10,16%		PFG	-1,21%		14,81%	***	14,57%	***
	(-2,122)		(0,709)		(1,191)			(-0,641)		(3,105)		(3,054)	
SBCF	1,12%		38,45%	***	39,59%	***	PFS	4,07%	*	14,13%	***	15,27%	***
	(0,249)		(3,289)		(3,387)			(1,669)		(2,883)		(3,115)	
SBNY	4,65%		29,68%	***	34,95%	***	PL	-9,25%	***	-4,59%		-12,80%	***
	(1,606)		(2,795)		(3,291)			(-6,035)		(-1,245)		(-3,471)	
SBSI	-5,42%	**	18,52%		28,28%	**	PNC	3,37%	*	11,99%		10,37%	
	(-2,403)		(1,434)		(2,189)			(1,65)		(1,601)		(1,385)	
SFNC	3,97%	*	33,87%	***	33,12%	***	PRU	-3,38%	*	16,04%	**	7,27%	
	(1,645)		(5,411)		(5,29)			(-1,775)		(2,521)		(1,143)	
SFST	1,03%		8,95%		19,64%	**	RF	7,24%	*	91,49%	***	56,52%	***
	(0,294)		(0,914)		(2,006)			(1,821)		(7,393)		(4,567)	
SHBI	2,46%		19,78%	***	21,13%	***	SFG	-1,27%		9,32%	**	3,71%	
	(0,858)		(3,43)		(3,665)			(-0,676)		(2,36)		(0,94)	
SLCT	-2,57%		-29,34%	*	-28,76%	*	SLF	1,29%		0,49%		7,80%	**
	(-0,52)		(-1,84)		(-1,809)			(0,912)		(0,148)		(2,376)	
SNBC	-6,22%	**	34,01%	***	36,07%	***	SNV	6,08%	*	22,82%	***	35,34%	***
	(-2,452)		(2,691)		(2,854)			(1,865)		(2,842)		(4,402)	
SOCB	-9,49%	***	-16,55%	**	-27,62%	***	STI	6,21%	*	41,30%	***	23,74%	*
	(-4,007)		(-2,399)		(-4,004)			(1,89)		(3,302)		(1,898)	
SSB	6,01%	**	24,68%	***	35,49%	***	STT	4,41%	*	-6,41%		-18,50%	**
	(2,379)		(3,688)		(5,304)			(1,889)		(-0,78)		(-2,252)	
STBA	0,99%		12,75%		23,19%	***	TCB	4,29%	*	38,81%	**	33,67%	**
	(0,458)		(1,448)		(2,635)			(1,651)		(2,442)		(2,118)	
SUBK	1,16%		16,35%	**	18,34%	***	TMK	0,80%		4,18%	**	10,83%	***
	(0,585)		(2,411)		(2,704)			(0,76)		(2,226)		(5,772)	
SUSQ	8,15%	***	38,49%	**	46,28%	**	USB	4,59%	**	17,05%	***	20,80%	***
	(2,912)		(2,157)		(2,593)			(2,215)		(2,69)		(3,283)	
SVBI	-2,45%		16,66%	**	6,99%		VLY	4,78%	**	15,80%	*	16,32%	*
	(-0,749)		(1,985)		(0,833)			(1,982)		(1,751)		(1,808)	
SYBT	2,28%		14,97%		19,75%	**							
	(0,862)		(1,612)		(2,127)								
TBBK	-1,54%		37,66%	***	54,09%	***							
	(-0,357)		(2,658)		(3,818)								
TCBI	4,87%	*	39,63%	***	39,93%	***							
	(1,853)		(8,966)		(9,034)								
TCBK	7,43%	**	57,07%	***	67,17%	***							
	(2,255)		(3,491)		(4,109)								
TFSL	-1,02%		12,32%	**	6,92%								
	(-0,631)		(2,574)		(1,445)								
THFF	-4,80%	*	20,65%	**	25,50%	***							

	(-1,878)		(2,308)		(2,85)								
TRCB	-9,19%	**	-2,82%		-5,44%								
	(-2,048)		(-0,294)		(-0,56)								
TRMK	5,87%	**	48,49%	***	36,99%	***							
	(2,245)		(6,903)		(5,267)								
TRST	4,76%	**	30,61%	***	43,00%	***							
	(2,047)		(2,626)		(3,69)								
TSBK	9,23%	**	3,81%		18,22%								
	(2,396)		(0,291)		(1,39)								
UBFO	-0,52%		29,05%	***	25,49%	***							
	(-0,154)		(4,197)		(3,682)								
UBSH	-5,34%	*	25,48%	**	30,30%	***							
	(-1,776)		(2,325)		(2,765)								
UBSI	4,48%	*	38,79%	***	51,28%	***							
	(1,651)		(4,146)		(5,48)								
UCBI	11,56%	***	46,62%	**	8,50%								
	(2,709)		(2,147)		(0,391)								
UMBF	-6,03%	***	12,75%	***	17,69%	***							
	(-2,987)		(2,809)		(3,895)								
UMPQ	5,69%		35,11%	**	37,28%	**							
	(1,437)		(2,444)		(2,594)								
UNB	1,84%	*	-3,22%		-1,50%								
	(1,901)		(-1,308)		(-0,609)								
UVSP	6,67%	*	29,61%	**	36,27%	**							
	(1,793)		(1,931)		(2,366)								
VPFG	2,90%	*	14,68%	***	17,98%	***							
	(1,791)		(3,584)		(4,39)								
WABC	6,09%	***	17,87%	*	27,72%	***							
	(2,603)		(1,839)		(2,852)								
WAFD	1,75%		34,70%	***	33,32%	***							
	(0,678)		(2,914)		(2,797)								
WASH	-3,49%		16,48%	**	21,53%	***							
	(-1,404)		(2,03)		(2,652)								
WFD	-2,14%		2,69%		10,11%	*							
	(-1,568)		(0,5)		(1,881)								
WSBC	0,51%		29,66%		35,87%	*							
	(0,149)		(1,436)		(1,737)								
WSBF	3,95%	*	9,29%	*	13,39%	**							
	(1,742)		(1,784)		(2,572)								
WSFS	-0,39%		16,06%	*	16,50%	*							
	(-0,177)		(1,896)		(1,948)								
WTBA	-6,00%		16,21%		31,01%	**							

	(-1,65)		(1,082)		(2,071)								
WTFC	5,99%	**	57,26%	***	55,07%	***							
	(2,097)		(3,808)		(3,661)								
ZION	6,75%	*	87,48%	***	76,97%	***							
	(1,705)		(5,381)		(4,735)								
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.													

Table 16 - H8 Test 1/Multinomial Logistic Regression

2007						2008					
Reference Category	Non Reclassified Firms					*Reference Category*	Non Reclassified Firms				
Cases Included in Analysis	356					*Cases Included in Analysis*	365				
Missing Cases	33					*Missing Cases*	24				
Total	389					*Total*	389				
Accuracy Rate	91,60%					*Accuracy Rate*	88,80%				
Likelihood Ratio test	173,488					*Likelihood Ratio test*	215,425				
Reclassified Firms			**US Firms**			**Reclassified Firms**			**US Firms**		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
RESTAS	**-5,499**	*	NAVSH	**0,109**	*	NAVSH	**0,076**	*	NAVSH	**0,092**	**
	(3,307)			(0,062)			(0,045)			(0,045)	
ROSC	**9,493**	*	PLOWB	**0,184**	***	ROSC	**5,739**	**	PLOWB	**0,022**	**
	(5,652)			(0,068)			(2,780)			(0,009)	
CGEAR	**-0,176**	*	ETL	**0,456**	**	DEBT	**0,037**	**	ETL	**-8,786**	***
	(0,106)			(0,232)			(0,020)			(2,929)	
Intercept	-0,221		Intercept	10,044	***	Intercept	-2,538	**	Intercept	9,085	***
	(1,729)			(2,542)			(1,205)			(1,586)	
2009											
Reference Category	Non Reclassified Firms										
Cases Included in Analysis	366										
Missing Cases	23										
Total	389										
Accuracy Rate	91,50%										
Likelihood Ratio test	181,913										
Reclassified Firms			**US Firms**								
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**						
NAVSH	**0,078**	**	*NAVSH*	**0,082**	**						
	(0,039)			(0,036)							
NPM	**9,367**	*	*PLOWB*	**0,023**	*						
	(6,782)			(0,015)							
CGEAR	**-0,579**	***	*ETL*	**-10,215**	**						
	(0,204)			(4,567)							
Intercept	-2,215	*	*Intercept*	10,862	***						
	(1,342)			(2,132)							

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 17 - Results of H8/Tests 2-3

Panel A:H8 Test 2a-Logistic regression for Reclassified Firms

Dependent variable	Year	*Dependent variable*	Year
Cases Included in Analysis	75	*Cases Included in Analysis*	71
Missing Cases	19	*Missing Cases*	11
Total	94	*Total*	82
Accuracy Rate	50,70%	*Accuracy Rate*	50,70%

2007-2008				2007-2009			
Variable	**Coefficients**	**Sig.**	**Exp(B)**	**Variable**	**Coefficients**	**Sig.**	**Exp(B)**
DAC	**-2,566**	***	0,077	DAC	**-0,739**	**	0,478
	(0,896)				(0,351)		
Constant	-1,697			Constant	0,337		
	(1,169)				(0,306)		

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel B

H8 Test 2b:OLS Regression of Accruals on Firm Financial Measures

1. Reclassified firms vs Not

2008			2009		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,050**	***	DV	**-0,014**	***
	(0,010)			(0,007)	
LNMV	**-0,008**	***	RESTAS	**0,528**	***
	(0,001)			(0,102)	
OPM	**-0,023**	***	OPM	**-0,322**	***
	(0,007)			(0,049)	
ETL	**-0,097**	***	ETL	**-0,049**	***
	(0,017)			(0,009)	
Constant	0,009		Constant	0,057	
	(0,002)			(0,001)	
R^2 adj.	0,664		R^2 adj.	0,713	
Sample size	84		Sample size	83	

2. US Firms vs Reclassified

2008			2009		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,006**	***	DV	**0,024**	***
	(0,002)			(0,003)	
SALETAS	**-0,046**	***	LNMV	**-0,001**	***
	(0,016)			(0,000)	

OPM	**0,006**	*	OPM	**0,002**	***
	(0,003)			(0,001)	
IGEAR	**0,004**	**	TLSFU	**0,004**	***
	(0,001)			(0,003)	
Constant	0,002		Constant	-0,012	***
	(0,001)			(0,002)	
R^2 adj.	0,472		R^2 adj.	0,515	
Sample size	331		Sample size	334	

3. US Firms vs not Reclassified

2008			2009		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,006**	*	DV	**0,004**	***
	(0,004)			(0,002)	
SALETAS	**-0,050**	*	SALETAS	**-0,038**	***
	(0,026)			(0,011)	
ROCE	**0,027**	***	ROCE	**0,024**	***
	(0,006)			(0,007)	
INTCOV	**0,004**	*	INTCOV	**0,005**	***
	(0,002)			(0,002)	
Constant	0,002		Constant	-0,001	*
	(0,002)			(0,001)	
R^2 adj.	0,314		R^2 adj.	0,316	
Sample size	334		Sample size	341	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel C

H8 Test 3:OLS Regression of A.R. on Firm Financial Measures

1. Reclassified firms vs Not

2008			2009		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**-0,282**	**	DV	**0,011**	***
	(0,111)			(0,004)	
SALETAS	**0,677**	**	NAVSH	**0,013**	***
	(0,268)			(0,004)	
OPM	**-0,096**	*	NPM	**0,101**	***
	(0,077)			(0,035)	
CGEAR	**0,028**	*	DEBTE	**0,007**	***
	(0,016)			(0,002)	
Constant	0,060		Constant	0,014	
	(0,016)			(0,001)	
R^2 adj.	0,574		R^2 adj.	0,742	
Sample size	84		Sample size	84	

2. US Firms vs Reclassified

2008			2009		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,076**	**	DV	**0,051**	***
	(0,033)			(0,013)	
LNMV	**-0,005**	***	SALETAS	**-0,168**	***
	(0,002)			(0,038)	
EPS	**0,001**	***	ROSC	**-0,121**	***
	(0,000)			(0,015)	
No sig. result for Leverage			TLSFU	**-0,003**	***
				(0,001)	
Constant	-0,044	***	Constant	-0,009	***
	(0,010)			(0,003)	
R^2 adj.	0,325		R^2 adj.	0,603	
Sample size	331		Sample size	334	

3. US Firms vs not Reclassified

2008			2009		
Variables	**Coefficients**	**Sig.**	**Variables**	**Coefficients**	**Sig.**
DV	**0,042**	***	DV	**0,055**	***
	(0,012)			(0,015)	
LNMV	**-0,005**	***	LNMV	**0,003**	***
	(0,002)			(0,001)	
ROSC	**-0,019**	*	ROSC	**-0,124**	***
	(0,011)			(0,016)	
TLSFU	**-0,003**	*	TLSFU	**-0,003**	***
	(0,001)			(0,001)	
Constant	-0,020	***	Constant	-0,012	***
	(0,008)			(0,003)	
R^2 adj.	0,326		R^2 adj.	0,575	
Sample size	334		Sample size	341	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 18 – H9 Results

Panel A: Results of Test 1a										
Australia	**2010**		**2011**		**2012**		**2013**		**Pair-wise *F*-test for equality of variances**	
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2010-2011**	**2012-2013**
Size										
SALESHA	0,35609	**0,70127**	0,70709	**1,89878**	0,26989	**0,46806**	0,61429	**1,80067**	**	**
NAVSH	0,89565	1,31228	0,89870	1,28365	0,64516	**0,80347**	0,79997	**1,20466**		*
SALETAS	0,29960	**0,31779**	0,40479	**0,55121**	0,35063	0,39333	0,45254	1,03191	*	
RESTAS	0,03700	0,46797	0,06028	0,46105	0,03587	0,47543	0,08189	0,41822		
RESSFU	0,10506	**0,22607**	0,23863	**0,94190**	0,26865	1,65146	0,64177	3,86850	*	
LNMV	3,81792	2,29806	3,56234	2,38313	3,67069	2,41680	3,96044	2,38969		
Investment										
DIVSH	0,07642	0,23555	0,08733	0,27518	0,07729	0,20523	0,05362	0,11952		
DIVYI	0,01322	**0,01732**	0,02547	**0,03448**	0,02659	**0,03541**	0,01414	**0,01752**	***	***
DIVCOV	1,02954	4,13951	-1,50749	10,94006	0,70371	**0,86724**	1,58895	**2,35221**		**
PE	2,00102	**13,41952**	0,33854	**3,32617**	9,32012	**17,11151**	10,55722	**22,03322**	*	**
HOLTA	0,40422	0,36568	0,37828	0,36287	0,32715	0,34376	0,35364	0,35920		
Growth										
MVBV	4,01088	**5,53435**	2,59030	**4,67312**	3,04244	**3,62545**	4,85093	**9,16314**	*	**
Profitability										
PLOWB	3,49403	**7,51467**	4,16176	**12,80474**	1,45446	**6,98415**	0,74224	**11,37536**	*	*
OPM	-0,10043	1,83437	0,17114	3,79912	-0,69374	**2,70753**	-1,56045	**5,49045**		**
NPM	-0,15016	1,82060	0,11798	3,78999	-0,75957	**2,69612**	-1,63757	**5,39983**		**
ROSC	-0,13489	0,77980	0,20936	1,14506	-0,03644	**0,53487**	-0,18681	**1,05011**		**
EPS	0,11169	0,28192	0,07975	0,24738	0,01600	0,14557	0,05524	0,19215		
ROCE	0,01079	0,26386	0,08112	0,61916	-0,03573	**0,52390**	-0,22975	**0,85461**		*
Liquidity										
CUR	2,39123	5,20219	2,70762	9,34648	8,47532	**13,02886**	13,23829	**27,96148**		**
CASH	4,36117	**12,79833**	2,33102	**3,51797**	2,45732	**4,03304**	4,13556	**8,91140**	**	**
QUI	2,39123	5,20219	2,70762	9,34648	8,47532	**13,02886**	13,23829	**27,96148**		**
CFSH	0,16586	0,41297	0,13457	0,37968	0,11281	0,40067	0,14449	0,44803		
CFM	-0,10793	1,80566	0,29660	3,69966	0,49548	**7,68706**	-3,99484	**17,90465**		**
WCR	0,60513	**2,05868**	0,45049	**4,20555**	0,83290	4,98644	2,03772	6,31571	*	
Leverage										
DEBT	6,47850	10,60776	7,47502	14,07296	3,17156	3,06983	3,91895	7,67643		
ETL	3,62634	**16,71694**	1,47782	**5,06827**	6,55221	**8,15292**	8,61235	**13,42283**	*	**
TLSFU	-0,10876	13,35518	-2,06878	22,48338	1,70210	6,83483	1,51956	5,37952		
CGEAR	0,83544	1,57488	0,72916	1,69476	0,82592	5,47029	0,85299	3,96331		
CLSFU	0,46025	3,09896	-0,17675	4,76957	0,34675	1,10987	0,42291	1,03059		
INTCOV	3,20094	**8,51782**	3,95295	**16,06414**	0,11623	**8,16940**	2,65308	**19,61893**	*	***

IGEAR	0,06859	0,54260	-0,03460	2,61278	0,19575	0,81966	0,03618	1,46517		
DEBTE	0,99199	4,06155	0,82449	3,48298	0,54087	**1,85767**	1,28147	**4,70864**		**
DSFU	0,50443	**1,23136**	-1,89203	**18,00289**	1,35534	6,42273	1,09665	4,92777	*	
Germany	**2010**		**2011**		**2012**		**2013**		**Pair-wise *F*-test for equality of variances**	
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2010-2011**	**2012-2013**
Size										
SALESHA	6,37949	**11,37305**	4,02894	**4,64062**	3,81774	**5,32318**	4,97658	**9,22660**	*	*
NAVSH	6,56211	6,62271	5,04877	4,87637	3,97987	**3,70093**	5,18672	**6,45398**		*
SALETAS	0,52637	0,69083	0,52053	0,65676	0,46663	0,61321	0,43639	0,72619		
RESTAS	0,25707	0,36714	0,27906	0,40344	1,26113	6,92532	1,10252	5,88648		
RESSFU	0,18015	0,44160	0,25418	0,23110	0,25816	0,23624	0,27653	0,24393		
LNMV	2,80340	2,12482	2,61319	1,97437	2,53830	2,07463	2,56254	2,11747		
Investment										
DIVSH	0,27856	0,63787	0,36654	0,74987	0,20421	**0,59306**	0,51184	**1,34277**		**
DIVYI	0,08676	**0,42103**	0,34681	**1,57551**	0,10387	**0,57739**	1,00448	**5,68740**	*	*
DIVCOV	2,48860	2,31951	3,86232	9,62519	3,60790	4,44728	3,44114	6,67090		
PE	4,99277	**11,44885**	8,52830	**16,58760**	2,31325	**13,42251**	3,25570	**21,39848**	*	**
HOLTA	0,34252	0,32411	0,30640	0,30073	0,30431	0,30846	0,31380	0,32799		
Growth										
MVBV	1,43224	1,75057	1,18279	1,63876	0,73646	0,80481	1,15554	1,31809		
Profitability										
PLOWB	1,81112	**4,00981**	3,27794	**6,52031**	1,56924	**5,59235**	3,38352	**7,92177**	**	**
OPM	0,32607	**1,32588**	0,57471	**3,03981**	-1,16163	**6,68168**	-3,35431	**11,61465**	*	*
NPM	0,27273	1,26838	0,54365	3,00142	-1,32733	**6,35340**	-3,32406	**11,60908**		*
ROSC	0,29040	1,64347	0,00028	0,37992	-0,03677	**0,44951**	-0,40212	**2,50441**		*
EPS	0,13633	1,98230	-0,03755	1,60404	-0,36370	3,51930	0,05121	2,47624		
ROCE	0,03016	0,24673	0,04847	0,25788	-0,03649	0,36740	-0,01446	0,34174		
Liquidity										
CUR	6,94702	**6,72043**	9,70117	**18,82794**	5,58677	**5,58770**	7,69598	**10,76265**	*	*
CASH	4,16347	10,49637	5,11818	13,31893	4,45949	**11,26285**	2,01752	**3,21901**		***
QUI	6,94702	**6,72043**	9,70117	**18,82794**	5,58677	**5,58770**	7,69598	**10,76265**	*	*
CFSH	0,44502	2,25729	0,16646	1,75409	0,29532	1,62766	0,26341	2,74255		
CFM	1,37996	11,17900	0,17311	3,24329	-0,80027	**5,10529**	-3,27513	**11,62933**		**
WCR	0,63420	**2,88309**	1,40660	**6,99424**	2,76793	13,13265	1,61608	7,43698	*	
Leverage										
DEBT	3,36134	**3,83121**	4,81655	**7,10260**	5,89608	9,32104	5,64413	9,53010	**	
ETL	4,76354	**5,03637**	6,01758	**7,84534**	4,46961	**6,25693**	6,52694	**13,45421**	*	**
TLSFU	0,74032	2,20111	1,02385	2,64180	0,68880	**0,93881**	1,28939	**2,88781**		**
CGEAR	0,68880	2,26222	0,65017	1,95007	0,70506	1,94717	0,83406	2,32185		
CLSFU	0,15402	**0,32199**	0,47530	**1,56069**	0,25219	**0,43793**	0,52551	**1,50513**	*	*
INTCOV	2,20524	**8,56600**	0,89079	**15,14612**	0,15686	**9,65815**	-0,28725	**16,23109**	**	*
IGEAR	0,13499	0,98087	0,27540	1,42302	0,11284	0,54008	0,17249	0,98820		
DEBTE	0,60985	2,69962	0,89250	2,78404	0,88111	**2,64863**	1,76614	**6,22696**		*

DSFU	0,27693	2,79358	0,54694	1,82506	0,60490	**1,96751**	1,47917	**5,86864**		*

UK	**2010**		**2011**		**2012**		**2013**		**Pair-wise *F*-test for equality of variances**	
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2010-2011**	**2012-2013**
Size										
SALESHA	1,42626	**1,87635**	0,90418	**1,18228**	1,10258	**1,40456**	1,57381	**2,10540**	**	*
NAVSH	3,25342	**2,91361**	4,87325	**6,33165**	3,88213	**3,97432**	6,06620	**8,33761**	**	**
SALETAS	0,24480	0,33731	0,23587	0,35218	0,24263	0,34654	0,22199	0,27340		
RESTAS	0,15181	0,20913	0,14628	0,21030	0,13309	0,21786	0,15650	0,24176		
RESSFU	0,21871	0,40798	0,23039	0,53253	0,17780	0,35600	0,19326	0,38522		
LNMV	6,31772	1,71715	6,23975	1,76159	6,36292	1,80485	6,62446	1,85301		
Investment										
DIVSH	0,14301	**0,12057**	0,18540	**0,16711**	0,21454	0,18101	0,22058	0,19590	*	
DIVYI	0,04313	**0,03160**	0,06649	**0,06628**	0,06879	**0,07870**	0,04777	**0,03856**	*	*
DIVCOV	3,80570	5,38215	0,32449	4,32205	1,19517	**4,25153**	4,66020	**5,51311**		**
PE	7,84164	**12,95414**	5,42610	**21,03140**	4,82284	**11,23845**	7,96659	**7,58842**	*	*
HOLTA	0,47427	0,42467	0,44810	0,42013	0,46161	0,42336	0,48962	0,43027		
Growth										
MVBV	1,82254	**2,58508**	3,32355	**9,91163**	1,95003	**4,20044**	4,30430	**12,73122**	**	**
Profitability										
PLOWB	2,88271	**4,22061**	2,53396	**9,43067**	1,34642	7,92674	1,62919	6,47813	*	
OPM	0,70007	0,95930	0,35681	1,44930	-0,15286	4,70464	0,50987	2,66434		
NPM	0,66314	0,95856	0,34745	1,36340	-0,03668	3,78681	0,53222	2,29164		
ROSC	0,09874	**0,12282**	0,07774	**0,24328**	0,17516	**0,55060**	0,12601	**0,20006**	**	*
EPS	0,61218	0,94370	0,24529	0,84573	0,48645	**1,01349**	0,99307	**1,42097**		**
ROCE	0,07829	**0,15931**	0,11907	**0,32073**	0,16028	0,53780	0,00957	0,57618	*	
Liquidity										
CUR	2,33762	**4,10305**	4,49478	**10,97620**	2,41277	**2,86499**	3,59121	**7,70302**	**	*
CASH	1,95639	5,33458	1,95949	4,06089	1,22481	**1,76420**	2,58360	**7,10516**		**
QUI	2,33762	**4,10305**	4,49478	**10,97620**	2,41277	**2,86499**	3,59121	**7,70302**	**	*
CFSH	0,71553	0,97936	0,34204	0,90703	0,57007	**1,03395**	1,08947	**1,43310**		*
CFM	0,70699	0,96601	0,37290	1,33724	0,00948	3,64827	0,57604	2,20379		
WCR	0,00585	**3,07367**	0,35866	**6,84636**	-0,19272	**2,68673**	-0,39855	**5,02422**	*	*
Leverage										
DEBT	1,71102	**1,72557**	2,21752	**2,69868**	2,48885	**3,76062**	4,94188	**13,64583**	**	**
ETL	2,23328	**2,27740**	4,29891	**8,64991**	3,03094	**4,37669**	6,09287	**13,67522**	**	**
TLSFU	0,82500	**1,30295**	1,38737	**3,31607**	1,35769	5,08927	1,21916	5,63843	*	
CGEAR	0,75494	1,12893	0,74249	1,15457	0,77743	1,27496	0,63250	1,05407		
CLSFU	0,34446	**0,75251**	0,52725	**1,31934**	0,53546	3,98214	0,50707	4,73983	**	
INTCOV	8,42453	**9,93636**	8,58923	**16,22567**	8,57869	**8,23333**	11,23228	**13,93386**	*	*
IGEAR	1,15135	4,93985	-0,09711	1,93220	0,27630	**1,12574**	0,09050	**0,57089**		*
DEBTE	0,98507	2,73885	0,94932	2,65887	0,91418	2,76145	0,80036	2,55038		
DSFU	0,86839	2,76625	0,83858	2,68128	0,82223	2,77225	0,71209	2,55484		

US	2010		2011		2012		2013		Pair-wise *F*-test for equality of variances	
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	**2010-2011**	**2012-2013**
Size										
SALESHA	9,90287	**10,80645**	8,12996	**7,84843**	8,38255	**8,54154**	9,57645	**10,98327**	**	*
NAVSH	14,94961	**15,75285**	14,35624	**11,17384**	13,88408	**10,68414**	15,64397	**13,61620**	*	*
SALETAS	0,45962	1,53340	0,54412	2,63982	0,47099	1,84067	0,37727	1,04678		
RESTAS	0,44906	0,68816	0,43280	0,47117	0,42665	0,44594	0,41025	0,34471		
RESSFU	0,44721	0,28009	0,45564	0,22327	0,46071	0,23962	0,45375	0,21155		
LNMV	6,99940	1,93212	6,88083	1,89726	7,08103	1,86930	7,35697	1,78191		
Investment										
DIVSH	1,51469	**3,41311**	1,15650	**1,66060**	1,10948	**1,08562**	1,33954	**2,46112**	**	*
DIVYI	0,06255	0,15246	0,06857	0,18679	0,08009	**0,24181**	0,05240	**0,13061**		*
DIVCOV	0,32724	**8,07798**	0,76822	**3,10233**	0,60722	**1,83744**	1,24533	**2,32621**	*	*
PE	11,22064	**28,04251**	10,00086	**21,93105**	10,82662	28,53658	19,16880	25,95973	**	
HOLTA	0,17285	0,25695	0,17343	0,25847	0,18201	0,26853	0,15661	0,24729		
Growth										
MVBV	2,21874	**4,38640**	1,66177	**2,54990**	1,87358	**3,06590**	2,51674	**5,04452**	**	**
Profitability										
PLOWB	0,49264	**17,57637**	1,85184	**10,08118**	1,11279	11,76157	1,83618	18,61057	*	
OPM	0,37384	**1,80291**	0,14350	**0,49019**	0,13804	**0,51779**	0,28159	**1,95600**	**	*
NPM	0,16417	0,65243	0,09188	0,33550	0,11633	0,28340	0,12414	1,48455		
ROSC	0,18160	0,94395	0,15988	0,94412	0,09197	**0,29770**	0,15402	**0,74955**		**
EPS	1,03446	6,14759	1,26662	4,71867	1,19494	2,55248	1,59370	2,69411		
ROCE	0,06370	**0,35194**	0,13600	**0,90996**	0,04096	**0,14085**	0,08648	**0,45336**	*	**
Liquidity										
CUR	2,12702	**3,04007**	1,78025	**2,24478**	1,75029	**2,34824**	2,08176	**3,06104**	*	**
CASH	0,81183	**1,65351**	0,65141	**1,11947**	0,71926	1,53286	0,75706	1,49112	**	
QUI	2,12702	**3,04007**	1,78025	**2,24478**	1,75029	**2,34824**	2,08176	**3,06104**	*	**
CFSH	2,26258	4,33761	1,88598	4,14560	2,36487	3,35953	2,85813	3,65459		
CFM	0,32780	0,64026	0,25774	0,93487	0,20772	2,29117	0,31042	1,50756		
WCR	-0,02410	**5,64126**	-0,02224	**3,44819**	0,18585	**10,47791**	-0,67127	**3,99300**	**	*
Leverage										
DEBT	2,27428	**3,18699**	1,89981	**2,02795**	2,39803	**4,02688**	2,04847	**2,59545**	**	*
ETL	1,29214	2,17815	1,33547	2,25001	1,30512	2,43277	1,29883	2,39366		
TLSFU	1,75897	4,19882	1,96565	6,49356	1,76231	6,29842	1,75485	4,00803		
CGEAR	1,13586	**2,50377**	0,87156	**1,26079**	0,82398	**2,51430**	0,78149	**1,02790**	**	*
CLSFU	0,71246	3,73921	0,88761	2,28667	0,85189	2,09876	0,82887	2,41596		
INTCOV	6,13541	**23,68729**	2,64226	**16,82492**	4,65839	**18,34971**	4,78832	**9,90915**	**	**
IGEAR	0,25034	3,53862	0,08910	4,54287	0,09835	**4,55149**	0,57272	**2,57496**		*
DEBTE	1,00316	1,78971	1,16322	2,29212	1,03811	2,69326	1,02672	4,26878		
DSFU	0,48638	**0,98994**	0,73695	**1,46366**	0,68240	1,94025	0,65060	2,08556	**	
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.										

Panel B:Test 1b-OLS Regression of Price on BVPS and NPPS								
Australia	**2010**	**Sig.**	**2011**	**Sig.**	**2012**	**Sig.**	**2013**	**Sig.**
R^2	**0,688**		**0,834**		**0,673**		**0,647**	
BVPS	**2,630**	***	**2,040**	***	**3,413**	***	**4,223**	***
NPPS	**5,388**	**	**5,332**	***	**7,698**	**	**11,34**	*
Sample Size	57		57		57		57	
Germany	**2010**	**Sig.**	**2011**	**Sig.**	**2012**	**Sig.**	**2013**	**Sig.**
R^2	**0,560**		**0,518**		**0,540**		**0,653**	
BVPS	**1,224**	***	**1,109**	***	**1,562**	***	**2,448**	***
NPPS	**2,407**	***	**1,366**	**	**0,657**	**	**1,241**	***
Sample Size	42		42		42		42	
UK	**2010**	**Sig.**	**2011**	**Sig.**	**2012**	**Sig.**	**2013**	**Sig.**
R^2	**0,725**		**0,819**		**0,800**		**0,909**	
BVPS	**0,558**	***	**0,595**	***	**0,516**	***	**0,349**	***
NPPS	0,721		**0,677**	*	**1,078**	*	**1,564**	**
Sample Size	40		40		40		37	
US	**2010**	**Sig.**	**2011**	**Sig.**	**2012**	**Sig.**	**2013**	**Sig.**
R^2	**0,599**		**0,684**		**0,557**		**0,566**	
BVPS	**0,329**	***	**0,261**	***	**0,491**	***	**0,901**	***
NPPS	**2,683**	***	**3,165**	***	**2,386**	***	**2,851**	***
Sample Size	158		164		166		172	

Panel C:Test 2- Logistic Regressions				
Australia	**2010-2011**		**2012-2013**	
Variable	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
ΔTq	**-1,459**	*	**0,939**	**
	(0,774)		(0,461)	
Included Cases	106		109	
Germany	**2010-2011**		**2012-2013**	
Variable	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
ΔTq	**-1,415**	***	**1,473**	**
	(0,424)		(0,707)	
Included Cases	89		93	
UK	**2010-2011**		**2012-2013**	
Variable	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
ΔTq	**-2,069**	***	**-2,483**	*
	(0,758)		(1,285)	
Included Cases	83		76	

US	2010-2011		2012-2013	
Variable	Coefficients	Sig.	Coefficients	Sig.
ΔTq	**-1,030**	***	**0,393**	**
	(0,333)		(0,181)	
Included Cases	320		338	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel D: Test 3a-Pearson Correlation between Accruals-OCF								
Australia	2010	Sig	2011	Sig	2012	Sig	2013	Sig
DAC-OCF	**-0,563**	***	**0,366**	***	**0,312**	**	**0,582**	***
Sample Size	57		57		57		57	
Germany	2010	Sig	2011	Sig	2012	Sig	2013	Sig
DAC-OCF	**-0,357**	**	**-0,287**	**	**0,289**	**	**0,393**	***
Sample Size	49		49		49		49	
UK	2010	Sig	2011	Sig	2012	Sig	2013	Sig
DAC-OCF	**-0,308**	**	**0,527**	***	**0,469**	***	**0,495**	***
Sample Size	43		43		43		43	
US	2010	Sig	2011	Sig	2012	Sig	2013	Sig
DAC-OCF	**-0,221**	***	**0,521**	***	**0,366**	***	**0,157**	**
Sample Size	172		172		172		172	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel D: Test 3b: Logistic Regression of Accruals				
Australia	2010-2011		2012-2013	
Variable	Coefficients	Sig.	Coefficients	Sig.
DAC	**-3,538**	*	**-8,887**	*
	(1,942)		(5,131)	
Included Cases	73		71	
Germany	2010-2011		2012-2013	
Variable	Coefficients	Sig.	Coefficients	Sig.
DAC	**3,226**	*	**4,997**	*
	(1,906)		(2,996)	
Included Cases	60		88	
UK	2010-2011		2012-2013	
Variable	Coefficients	Sig.	Coefficients	Sig.
DAC	**3,251**	***	**-10,180**	**
	(0,862)		(3,953)	

Included Cases	76		66	

US	**2010-2011**		**2012-2013**	
Variable	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
DAC	**0,979**	*	**-1,977**	*
	(0,559)		(1,041)	
Included Cases	249		280	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel D: Test 3c - Earnings Quality

Australia	**2010**		**2011**		**2012**		**2013**	
Test Variables	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
R^2 adj.	**0,253**		**0,222**		**0,160**		**0,424**	
F test	18,980	***	16,409	***	10,326	***	37,864	***
OCF	0,003	***	0,226	***	-0,018	***	-0,104	***
	(0,001)		(0,056)		(0,006)		(0,017)	
Sample size	54		55		50		51	

Germany	**2010**		**2011**		**2012**		**2013**	
Test Variables	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
R^2 adj.	**0,443**		**0,148**		**0,315**		**0,214**	
F test	36,761	***	7,769	***	20,340	***	9,980	***
OCF	-0,451	***	-0,097	***	0,282	***	0,028	***
	(0,074)		(0,035)		(0,062)		(0,009)	
Sample size	46		40		43		34	

UK	**2010**		**2011**		**2012**		**2013**	
Test Variables	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
R^2 adj.	**0,442**		**0,309**		**0,187**		**0,200**	
F test	34,308	***	18,882	***	9,049	***	9,778	***
OCF	-2,206	***	-1,814	***	-0,126	***	-0,191	***
	(0,377)		(0,418)		(0,042)		(0,061)	
Sample size	43		41		36		36	

US	**2010**		**2011**		**2012**		**2013**	
Test Variables	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**	**Coefficients**	**Sig.**
R^2 adj.	**0,180**		**0,178**		**0,118**		**0,169**	
F test	38,605	***	36,686	***	23,292	***	35,462	***
OCF	4,858	***	-1,382	***	0,232	***	2,760	***
	(0,782)		(0,228)		(0,048)		(0,464)	
Sample size	172		166		168		170	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.